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RELATING

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The Revenue Commissioner reports, that in the Poonah Collectorate, the system is to tax the Wells, while in the Collectorates of Ahmednuggur and Candeish, it is to lay an enhanced rate on the watered land, 74.—adverts to the origin of the Well tax established in the Poona Collectorate; points out that instead of encouraging irrigation, it has led to the abandonment of a large number of Wells; states, that the Veer Hoonda imposed in the Poona Zillah is burdensome and unequal, 75.—Recommends that tax be abolished in the Poona Collectorate, and except in the district of Sholapoor, without any additional assessment being imposed on the land in lieu thereof, 76.—notices a recommendation by the Acting Collector of Ahmednuggur, to reduce the assessment on irrigated lands, which he considers would involve too heavy a sacrifice, and suggests therefore, that only partial reductions be made, they being in each case, preceded by local investigation, 77.—adverts to Major Robertson's recommendation, that new Wells, sunk in Meeras Estates be exempt from taxation; and suggests, that the exemption be applied also to all Zerayet lands, 78.—explains the grounds on which the difference between the course he has recommended for adoption, in the Poona and the Ahmednuggur Collectorate res-

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The Collector of Candeish reports the rates of assessment on lands irrigated by Wells; states, that in some instances they depend upon the description of the crop produced; that lands which have once been watered, are subject to a higher tax, than the Zerayet, called Korud, which he considers objectionable; and recommends a general reduction of the assessment on lands irrigated from Wells, 87.

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The Principal Collector of Poona recommends, that the Veer Hoonda be abolished in the Sub Collectorate of Sholapoor, and that an extra cess, in lieu, be levied on Bagayet lands, and that the extra cess be levied on such land throughout the principal division of the Poona Collectorate, 91.

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The Revenue Commissioner, and the Collector of Candeish report, that the plan suggested for the Candeish Collectorate, that lands capable of being irrigated, shall, when left unirrigated, from causes beyond the control of the holder, and only in such cases, be exempt from extra assessment, would be attended with inconvenience; and the Revenue Commissioner recommends, that the adjustment of the various questions, as regards the assessment of irrigated lands in that district, be left to the Collector, and suggests, that abatements be made, 100.

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The Revenue Commissioner, to a proposition by the Collector of Ahmednuggur, that a uniform reduction be made in the Bagayet assessment, to the extent of one half, objects, on the grounds that, as the assessment is unequal, the abatement ought not to be uniform, 105.—states, that he does not think, that the rule exempting new Wells from extra assessment, is liable to objection, as having a tendency to cause old Wells to be abandoned; but recommends the reconsideration of the question, after the expiration of a term of four years, 106.—Recommends the abolition of tax termed Pan Burreet, 106.

The Collector of Ahmednuggur recommends a general reduction of the assessment on Bhagayet lands, to the extent of one half the amount; adverts to the difficulties that would attend an attempt to regulate the abatement, so as to remedy inequalities in the assessment: and as a further ground for the necessity of a general reduction, notices the deterioration which old Bhagayet lands are likely to suffer, from the operation of the rule by which new Wells are exempt from extra assessment, 107.—He also recommends the abolition of the tax termed Pan Burreet, 108.

Government resolves not to disturb, for the present, existing arrangements in regard to the assessment of irrigated lands, but has recommended, to leave the question for consideration, after the expiration of four years; direct that the orders for modifying the Bagayet rates be acted on, without delay, 109.—and sanction the abolition of the tax termed Pan Burreet, 109.

The Revenue Commissioner reports, that on his arrival at Sholapoor, he found that the Principal Collector had given an order for the suspension of the collections on the Bagayet lands, and that he has countermanded the order, 109.

The Principal Collector of Poona adverts to the proceedings adopted by the successive Sub Collectors of Sholapoor, in assessing irrigated land, in consequence of the abolition of the Veer Hoonda; states, that those measures have given rise to great discontent; notices the injurious consequences resulting from frequent changes in the individual holding the office of Sub-Collector; recommends, that an accurate measurement of all Bagayet lands be made, previous to the fixing of a definite assessment; and reports, that in the mean time, he has given orders for the suspension of the collections on Bagayet lands, 110.

The Acting Sub-Collector of Sholapoor, adverts to the discontent prevailing, connected with the Bagayet assessment; recommends, that an abatement therein be allowed to the extent of one half for the present year, and that the assessment be then revised, after an accurate survey, 113.

Mr. Goldsmid, Assistant to the Principal Collector of Poona gives a view of the proceedings of the different Sub-Collectors of Sholapoor, and of those of the late Mr. Hornby in particular, as connected with the assessment of garden lands in the Sub-Collectorate, on the abolition of the Veer Hoonda; represents the discontent to which the arrangements made by Mr. Hornby have given rise; and recommends, that the extra assessment on Bhagayet, be relinquished for the present season, but under a clear understanding on the part of the Ryots, that the right of Government to such extra assessment is retained, and will be exercised in future years, 114.

The Sub-Collector of Sholapoor represents, in his Jummabundy report, the difficulty he experienced in settling the rate on Bhagayet land; explains how it is, that the assessment thereon exceeds the Veer Hoonda; states, that he sees no objection to the Veer Hoonda as a system, but that the fault in the application of it was, that too many Wells were exempted from it; and objecting to any system, which would involve the annual measurement of irrigated land, an account of the facilities which it would afford to fraud, 122.

The Revenue Commissioner intimates to the Principal Collector of Poona, his having settled the assessment on Bhagayet land in two of the villages in the Sub-Collectorate of Shalapoor, and details the principles on which he conducted it; he adverts to the necessity for liberality, in fixing the number of years for which a party sinking a new Well should be exempt from extra assessment, 123.—disapproves of the Principal Collector's order, for suspending the collection of the Bhagayet tax; and directs, that it be rescinded, and deprecates, on general principles, the placing of any portion of the assessment under suspension, 126.

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The Acting Sub-Collector of Sholapoor urges the necessity for the introduction of a permanent system, for the settlement of the Bagayet assessment of that district; stating, that he considers the system introduced by the Revenue Commissioner, to have been intended only to meet the exigencies of the present year, and to be unsuitable as a permanent arrangement, 130.—the system the Acting Sub Collector proposes is, that all Bagayet land be surrounded by hedges, as a land-mark, and for security, that they be then measured, and assessed moderately for ten years; that, upon special investigation, any garden be lessened or enlarged, as circumstances may require, in the mean time; and that at the end of ten years the assessment be revised, 131.

The Revenue Commissioner intimates to the Principal Collector of Poona, that though he approves of Mr. Luard's plan, for the establishment of permanent land-marks, in circumstances where it may be applicable, he does not consider it suitable for general application; because, changes are often made in the quantity of land irrigated, and in the parcel of ground irrigated from the same Well. He further states his opinion, that as the Bagayet assessment in the Sholapoor districts is in great confusion, the proper course is, gradually to modify the assessment, so as to adapt it to the circumstances of the Ryots, refraining from any attempt at a permanent improvement on a large scale, until more experience has been acquired, 132.

Government approves generally of the sentiments expressed by the Revenue Commissioner, in his letter to the Principal Collector of Poona; conceives however, that the circumstance on which his objection to the plan suggested by Mr. Luard rests, namely, that garden cultivation frequently shifts its place, is only temporary, being caused by the depressed state of cultivation, and the imperfect modes of management, which at present obtain; and that the plan will be found suitable in a more advanced state of things, when the arrangements suggested by Mr. Luard, will probably be made by the Ryots themselves, spontaneously. Mr. Luard's zeal is commended, 133.

The Revenue Commissioner recommends the remission of the Bagayet assessment, for three years, on lands in the Sub Collectorate of Sholapoor, watered from such Boorkees as may be con-

structed subsequently to the issue of a proclamation, announcing the arrangement, 134.

Government sanctions the remission, on the ground of the inexpediency of taxes on agricultural improvements; at the same time, it is pointed out to the Revenue Commissioner, that though Boorkees are less productive than Wells, the latter cost much more, 135,

The Revenue Commissioner, in reference to the assessment on lands irrigated from Boorkees in the Ahmednuggur Collectorate, notices, that though in some cases that mode of irrigation is as profitable as that by Wells, still there is great difficulty of drawing the line between those Boorkees that could, and those that could not, bear an extra assessment; he therefore recommends, that the Zerayet rate only be levied on all such lands, and proposes, that the rule be extended to the Poona, and Sholapoor districts, 135.

The Revenue Commissioner, in a letter to the Collector of Ahmednuggur, adverts to the remission of the cess termed Pan Burreet, which remission, thò indispensably necessary in general, he considers to have been improperly extended to many cases, on no better grounds, than the mere circumstance of the cess remitted having been termed "Pan Burreet;" and suggests, that such Boorkees as can well bear it, be assessed according to Bagayet, and the remainder according to the Zerayet rate only, 136.

The Collector of Ahmednuggur sees no objection to the levy of the Bagayet rates, on lands watered from Wells and Paths, that have been exempted from extra assessment, by the remission of Pan Burreet; but is of opinion, that it would be better to levy only the Zerayet rate, on lands watered from Boorkees of whatever description, 138.

Government authorize the Revenue Commissioner to exempt from extra assessment, land watered from Boorkees, in the Ahmednuggur Collectorate, and also in the districts of Poona and Sholapoor, 139.

SUMMARY OF THE PRINCIPAL POINTS.*

In furnishing a summary of the principal points treated of in the following paper, the first that present itself is:

As to the Parties liable to bear the expense of constructing and repairing Wells and other means of irrigation.

It is quite clear, that Government is in general the party by which this expense should be borne. If the circumstances of the case left any doubt on this point, it would be removed by the orders of the (*14) Hon'ble the Court of Directors, which state explicitly, that there can be no doubt as to the policy of such disbursements by Government, where the whole of the rent, or so great a portion of it, is received by Government, as is received by it, in almost every part of India. It is true, that there is an apparent dissent in opinion of this point by (7) Major Robertson, the Principal Collector of Poona, and (8) Major Pottinger, the Collector of Ahmednuggur; but the opinions expressed by those officers, on the occasions in question, would seem to have been intended to be understood as referring to works, the benefit of which would be reaped by the people exclusively, and not be shared by Government.

As regards the liability of the people, to be required to assist towards the execution, or preservation of such works, (6) Mr. Chaplin, the Commissioner in the Deccan reports, that a proportion of assistance in repairing Tanks &c, is by the custom of the country, in some districts, exigible from the Ryots; and he describes particularly the nature and extent of this assistance; from this description it appears, that the calls to which the Ryots are liable, are for the execution of only such repairs as are trifling in themselves, though in general of such a nature, as to require to be so promptly executed, as that they must, of necessity, be done by parties on the spot. Mr. Chaplin's views on this subject are borne out by reports by (72) Mr. Thackeray, the Principal Collector of Dharwar, (10) Mr. J. H. Cherry, the Collector of Ahmedabad, and, (72) Mr. Walter Elliott, the Collector of Hoobly; though these Gentlemen do not enter so particularly into the subject as Mr. Chaplin, (45) Mr. Williamson, the Acting Collector of Kaira, remarks, that under the Native Governments, the people themselves looked after the repair of village Wells, but he at the same time states, that in those days the Government did not interfere in the internal affairs of the villages, but left them to the management of the Patells, and that the alteration which has taken place in this respect, under the British rule, renders it necessary, that the Government should afford some assistance towards the execution of such works, enough, at the least, to insure their being commenced on. It is evident however, on the whole, that Mr. Williamson, who writes from Guzerat, assigns a larger proportion of the work to the people, than Mr. Chaplin and the other Gentlemen who write from the Deccan do, this is probably attributable to the difference of local circumstances.

* The parenthesed figures throughout, denote pages for refereace.

The next point to be noticed, is:

The Source whence the Funds requisite for the execution of such works, should be obtained.

The simplest, and most obvious mode of supplying the Funds in those cases, in which the expense is to fall on Government, would appear to be by advances of cash from the public Treasury, (5) Mr. Chaplin, the Commissioner in the Deccan, and (13) Mr. Boyd, the Officiating Collector of Broach, object to the adoption of this plan. (14) Mr. Lumsden, the Collector of Surat, seems to favor it, but not very decidedly; no other public Functionaries appear to have noticed this point specifically. (15) The Hon'ble the Court of Directors are not in favor of it: they observe, that it is but too probable, that Funds so advanced will, in great part be wasted. The plan generally approved, seems to be, to hold out inducements to the people themselves to invest capital in such works.

This brings us to the next point to be noticed, viz.

The best means of inducing the people to expend capital on such works, and the mode of reimbursing them, for such outlays.

(2 & 23) The Commissioner in the Deccan states, that in Candeish, it was the practice under the Mahratta Government, in cases in which little skill is required, to assign in Enam to persons undertaking to put dams in repair, a portion of the land watered by them; he recommends that this practice be continued, and suggests that a third, or a half of the irrigated land should be so assigned. (3) He also recommends, that such improvements be encouraged by the grant of favorable Cowls for a long term of years. (8) The Assistant Collector of Candeish also notices the practice above referred to, and states, that though Enams were also sometimes granted to those who dug Wells, the ordinary mode of encouraging such works was to continue for a certain number of years, the land watered by them, without any increase of assessment; and that no measures appear to have been adopted by the Mahratta Government for keeping Wells in repair. (9) The Principal Collector of Dharwar recommends the grant of Cowls to those who construct Tanks and Wells: he also reports, that in some villages of that district, lands had been assigned in Enam, to provide funds permanently, for keeping Tanks in repair, but that such Funds had in general been misappropriated. (70) The Sub Collector of Bagulkote reports, that the measures adopted by Mr. Thackeray, of allowing a temporary exemption from extra assessment, and of granting a portion of the land in Enam, had not been found effectual; He also states, that where a fixed Assessment has been made, an assurance has been given, that new Wells may be constructed without the liability being incurred of an increased rate being demanded, and expresses his opinion, that this assurance, which had led to some new Wells being made, ought to be given generally throughout those districts. (12) The Officiating Collector of Broach

reports, that it would be at variance with the established practice in that Zilla, and is inexpedient to grant either Cowls or Enams to persons who construct Wells or Tanks. (13) The Assistant Collector in charge of Kaira reports, that encouragement has been given for the construction of Wells in that Zilla, by the grant of Puttas, and abatements in the Assessment, but that the terms have not been sufficiently favorable to operate to any considerable extent; he recommends the adoption of the suggestion of the Commissioner in the Deccan, for giving up one fourth of the land brought under irrigation in Enam, and allowing the rest to be held on easy terms for a few years.

(16) Mr. Norris suggests an arrangement, the object of which is to encourage the construction of new Wells, but in such a manner as not to create any inducement to abandon the old ones: the plan is, that a Ryot who possesses a Well, shall, on sinking a new one, continue to hold both, at a reduced rate of assessment. (21) This plan being referred to the Commissioner in the Deccan, he gives it as his opinion, that it does not hold out sufficient encouragement to persons, who might be disposed to sink Wells; (22) he also again adverts to the native plan of granting a portion of the land irrigated by a new Well entirely rent free, to which he seems to give the preference. (23) The Regulation Committee, of which Mr. Norris was a Member, on the letter from the Commissioner in the Deccan being referred to them, point out, that Mr. Chaplin's observations relate principally to the details of the conditions specified in Mr. Norris' plan, which details, it was supposed from the first, would require to be modified according to circumstances, and in reference to Mr. Chaplin's remarks in favor of the native plan, (24) they state the grounds on which they consider it preferable to lighten the assessment generally, on the land brought under irrigation, than to grant a certain portion of such land entirely rent free. (26) They also discuss the question, as to whether the encouragement held out to persons making improvements, should consist in granting them permanent, or temporary advantages, recommending, that such advantages be partly permanent, and partly temporary in their character. (28) The Acting Collector of Kaira, in replying to a reference on Mr. Norris' plan, reports, that the plan which he has adopted to encourage the construction of Wells, is simply to allow the party undertaking the work, to enjoy the full benefit of it for a term of years, longer or shorter, according to the expense likely to be incurred, on the expiration of which term, Government participates in the improvements. This plan, he states, is sanctioned by local custom, and has been found to succeed. (28) The Regulation Committee are of opinion, that the plan of the Acting Collector of Kaira is the simplest and best, where the assessment on irrigated land is sufficiently moderate, but that, where such is not the case, the plan would not afford such encouragement as would ensure a Well from being abandoned; and recommend, that in such cases the party sinking the Well be allowed, in addition to his temporary advantage, to participate

permanently in the profits arising from the improvement. (32) The Collector of Surat reports, that the introduction of Mr. Norris' plan into that district, would cause great discontent on the part of all those who did not participate in the benefits of it. (32) The Collector of Broach considers the plan more suitable to an estate where its details could be superintended, than to a Collectorate; he is not however averse to a trial of it being made. (34) The Collector of the Northern Concan considers the plan to be an indirect mode of effecting what may be done in a direct, and preferable manner, by lowering the assessment on irrigated land, if it is too high. (48) The Collector of Ahmednuggur reports, that Mr. Norris' plan does not hold out sufficient encouragement, and that the smallness of the profits of agriculture, and the minute subdivision of landed property are impediments to its success. (65) The Superintendent of the Revenue Survey and Assessment in the Deccan reports, that Mr. Norris' plan would be both confined and unequal in its operation, excluding those persons who are most in need of assistance; and that the premium it holds out, would in some cases, prove unnecessarily large, and in others altogether inadequate.

(38) The Revenue Surveyor of Guzerat, Captain Cruickshank reports, that the existing practice of granting Gunwut, fails to instil sufficient confidence, and that an established rule holding out a prospect of a liberal profit, in addition to the repayment of the outlay incurred, would operate beneficially: the rule should prescribe the number of years for which exemption should be allowed for the different classes of Wells respectively, allowing to superior Wells a lighter Begotie in perpetuity. He gives an example of the method of calculating the cost of a Well, and the number of years for which exemption should be allowed on account of it. (58) The Collector of Candeish reports, that the rules suggested by Captain Cruickshank, are not applicable to the circumstances of that Province; that the plan hitherto followed there, has been to allow remissions to an amount sufficient to cover the cost of a new Well, and that for the repair of old Wells, which he considers more important than the construction of new ones, remuneration has been granted according to the circumstances of each case. (43) The 1st Assistant Collector at Broach reports, that Captain Cruickshank's remarks do not apply to that district. (44) The Acting Collector of Kaira reports, that the practice in that district is, in its general outlines, the same as that proposed by Captain Cruickshank, and objects to the introduction of any change: he considers it inexpedient to lay down fixed rates for remunerating persons who construct Wells, as it is impossible to frame a table applicable to every variety of circumstances. (47) The Collector of Ahmednuggur reports, that Captain Cruickshank's plan is not applicable in that Collectorate. (66) The Superintendent of the Revenue Survey and Assessment in the Deccan reports, that Captain Cruickshank's plan is not applicable to the Deccan, because unlike Guzerat, it is impossible there to estimate with any tolerable de-

gree of certainty the cost of a Well of any given dimensions and description.

(49) Mr. Dunlop recommends, that the construction of a Well be viewed as a mercantile speculation, and that the party constructing it, be allowed to hold the irrigated land on such terms as would afford him interest for the capital expended, and a small provision for the liquidation of the principal, the remainder of the proceeds being taken as the Revenue of Government: for the practical application of his plan he submits a scale for lowering the assessment according to the cost of a Well. (65) The Superintendent of the Revenue Survey and Assessment in the Deccan, is of opinion, that the plan would be equal in its operation, but that the terms suggested by Mr. Dunlop, are not sufficiently liberal, he also suggests, that the original cost of a Well should be redeemed by a temporary exemption from assessment, and that the expense of cultivating under it should remain an annual charge on the produce.

(51 and 67) The Superintendent of the Revenue Survey and Assessment in the Deccan proposes rules, which are adopted by Government, for encouraging the sinking of Wells, prescribing, that the Well assessment be kept distinct from the rent of the land; that persons engaging in such works be allowed a grant in Meeras; that of the net profits two thirds be considered the Government share, and one third that of the proprietor, the Government share being remitted until the proprietor be thereby reimbursed for his original outlay; that the rent of old Wells be fixed on the same principle as to rate, the advantages being enjoyed only by the original proprietors, or those who may become proprietors. (74) The Revenue Commissioner reports, that within the Poona Collectorate the Veer Hoonda, instead of encouraging irrigation, has led to the abandonment of a larger number of Wells; states that it is burdensome and unequal, and recommends, that it be abolished, and without any additional assessment being imposed in lieu of it, except in the Sub Collectorate of Sholapoor. (89) This arrangement is adopted by Government. (93) The Sub Collector of Sholapoor reports, that irrigation has declined under the system of the Veer Hoonda, that it operates harshly, the chief objection to it however consisting in its not being regulated in amount by the extent of land irrigated: he also states, that the superior advantages enjoyed by persons who sink the more costly Wells, is a source of discontent, and that the system affords facilities for the commission of fraud. He intimates, that the people are willing to submit to a cess in lieu of the Veer Hoonda, and recommends, that in the event of that Tax being discontinued, a higher assessment than the Zerayet rate, be laid on Bhagayet lands. (99) Government resolve on the abolition of the Veer Hoonda in the Sub Collectorate of Sholapoor, and that the system in force previous to its introduction be again resorted to.

(56) Mr. Boyd, the Acting Collector of Ahmednuggur, proposes, that an offer be made to the people, of the grant, in perpetual

Enam of one fourth of all land brought under irrigation, upon condition, that the cultivation of the remaining three fourths be kept up. (57) The Principal Collector of Ahmednuggur approves of the plan, and so does the Collector of Poona, who however thinks, that it should apply to old Wells as well as to new ones: he also states, that it accords with the practice which obtains in the Nizam's Territories. (57) The Superintendent of the Revenue Survey of the Deccan, considers the plan more simple, but less comprehensive and precise than that already sanctioned by Government, alluding to the plan which he himself suggested; and, (58) Mr. Dunlop is averse to Mr. Boyd's plan, on the ground, that the advantages it holds out to speculators, are inferior to those held out by the rules already sanctioned. Again Mr. Boyd, having become Collector of Candeish, represents, that the assessment on irrigated land is too high, and recommends, that it be allowed to be held at the same rate as land not irrigated, on condition, that a certain quantity of the latter be cultivated with the former. (59) Mr. Dunlop, the Revenue Commissioner, thinks, that it would be better to reduce the assessment, than to impose any such condition, which would have the effect of forcing cultivation.

(69) The Court of Directors observe, that the party constructing a Well, should enjoy exemption from assessment for a sufficient period, to reimburse him for his outlay. (69) The Principal Collector of Dharwar reports, that the quantity of land in that Collectorate irrigated from Wells, is small, and explains, that the system adopted for the encouragement of its extension is that specified by the Hon'ble Court, and in some cases to grant Enams. (126) The Revenue Commissioner adverts to the necessity for liberality in fixing the number of years for which a party sinking a Well should be exempt from extra assessment.

(102) The Revenue Commissioner notices the good effects that have resulted from the aid allowed by Government to the Ryots of the Ahmedabad Collectorate, for the extension of irrigation; reports the mode, by the grant of Gunwuts, allowing temporary abatements in the assessment, in which encouragement is given to the sinking of Wells, and recommends, that small loans be occasionally made for that purpose. (105) Government authorizes the grant of Gunwuts and of small loans occasionally.

(84) The Acting Collector of Ahmednuggur, submits a statement of the amount of revenue the Government would sacrifice by reducing the rates on Bagayet land, to the rates of Zerayet, he considers the additional assessment on Bagayet an impediment to the extension of irrigation, but is doubtful whether the abandonment of the whole of it would promote superior cultivation to an extent proportionate to the probable loss of revenue; recommends, that as an experiment, the Bagayet lands be let at a small advance above the Zerayet, and at one uniform rate throughout the Collectorate, or that persons who sink Wells be allowed the land thereby irrigated, rent free for a term of years. (90) Government sanctions a reduction in the Bagayet rates in that Collectorate.

On the best mode of assessing Irrigated Land.

(69) The Court of Directors doubt the propriety of the system obtaining in Candeish, of assessing irrigated land according to the species of crop produced, and are of opinion that the land should be assessed according to its actual powers of production. (72) The Sub Collector of Hoobly reports, that the land in that district is assessed according to fixed rates, and not with reference to the kind of crop produced; that the land is classed as dry, wet, and garden, and passes from one class to another, by the change of circumstances.(83) The Principal Collector of Ahmednuggur reports, that the assessment on irrigated land used to be sometimes on the Beegas and sometimes on the crop, but that it is now entirely on the former plan. (87) The Collector of Candeish reports, that the rate of assessment there, does in some instances depend upon the description of the crop produced, and also states, that it is the practice to subject lands that have once been, but have ceased to be watered, to a higher assessment than the Zerayet rate, under the denomination of Koorud, which he considers objectionable.

(100) The Revenue Commissioner and the Collector of Candeish report, that the plan suggested for the Candeish Collectorate, that lands capable of being irrigated shall, when left unirrigated, from cause beyond the control of the holder, and only in such cases, be exempt from extra assessment, would be attended with inconvenience, and the Revenue Commissioner recommends, that the adjustment of the various questions as the assessment of irrigated land in that district, be left to the Collector. (102) Government sanction the entire reduction of the Koorud Dhur.

(107) The Collector of Ahmednuggur recommends a general reduction of the assessment on Bagayet lands, to the extent of one half the amount; adverts to the difficulties that would attend an attempt to regulate the abatement, so as to remedy inequalities in the assessment, and as a further ground for the necessity for a general reduction, and notices the deterioration which old Bagayet lands are likely to suffer from the operation of the rule by which new Wells are exempt from extra assessment. (105) The Revenue Commissioner remarks on the Collector's proposition, that as the assessment is unequal, the abatement ought not to be uniform,(106) and states, that he does not think that the rule exempting new Wells from extra assessment is liable to objection, as having a tendency to cause old Wells to be abandoned, but recommends, that the question be reconsidered after a term of four years. (109)Government resolves, not to disturb for the present, existing arrangements in regard to the assessment of irrigated lands, but as recommended by the Revenue Commissioner, to leave the question for consideration, after the expiration of four years, and direct, that the (89) orders for modifying the Bagayet rates, be acted on without delay.

(106, 108, & 109) On the recommendation of the Revenue Commissioner and the Collector of Ahmednuggur, Government sanc-

tion the abolition of a tax termed "Pan Burreet," levied on Zerayet land made into garden land. (136) The Revenue Commissioner subsequently points out to the Collector of Ahmednuggur, that the order for the remission of "Pan Bureet" has been improperly applied to some cases in which the cess remitted, differed in its nature from that happened to bear the same appellation, as the objectionable cess.

(130) The Sub-Collector of Sholapoor, urges the necessity for the introduction of a permanent system, for the settlement of the Bhagayet assessment of that district. The system which he recommends is, that the holders of Bhagayèt land be required to surround it by hedges, to serve both as a boundary line, and for the security of the produce; that the land then be measured and assessed moderately for ten years; any garden so defined, being in the meantime, lessened or enlarged, as circumstances may require; and that at the end of the ten years the assessment be revised. (130) The Principal Collector states, that he sees no objection to the arrangement recommended by the Sub-Collector; but he at the same time states his opinion, that Bhagayet cultivations will not increase until the rate of assessment levied on it, be moderated. (132) The Revenue Commissioner approves of the Sub-Collector's plan, for the establishment of permanent land-marks, in circumstances where it may be applicable, but he does not consider it suitable for general application, because changes are often made in the quantity of land irrigated from the same Well. He further states his opinion, that as the Bhagayet assessment in the Sholapoor district is in great confusion, the proper course is, gradually to modify the assessment, so as to adapt it to the circumstances of the Ryots, refraining from attempts at permanent improvement on a large scale, until more experience has been acquired. (133) Government approves generally of the sentiments expressed by the Revenue Commissioner, but conceives that the circumstance on which his objection to the plan suggested by the Sub Collector rests, namely, that garden cultivation frequently shifts its place, is only of temporary operation, being caused by the depressed state of cultivation, and the imperfect mode of management which at present obtains, and that the plan will be found suitable in an advanced state of things, when the arrangements suggested by the Sub Collector, will probably be made by the Ryots themselves, spontaneously.

(139) On the recommendation of the Revenue Commissioner, Government sanction the exemption from extra assessment of land watered from Boorkees in the Ahmednuggur, Poona and Sholapoor districts. (135) It had been pointed out to the Revenue Commissioner, that though Boorkees are less productive than Wells, the latter cost much more; but he, (135) explained, that though Boorkees are in some cases as profitable as Wells, it is impossible to draw the line between those that can, and those that cannot, bear an extra assessment.

REPORTS

ON

ARTIFICIAL IRRIGATION.

Mr. Marriot, the Collector of the Northern Concan, in a letter dated the 9th of March 1822, represented the impaired state of the Tanks and Wells generally throughout his Collectorate, and recommended the adoption of measures on a very extensive scale, and involving a very great outlay, for their repair.

In reply he was called on the 26th of March, to report, what means used to be adopted by the Native Governments for such purposes. The Commissioner in the Deccan was also, at the same time, called upon for information, in respect to the practice of the former Government in clearing out and keeping in repair Village Tanks and Public Wells in the Southern Marhatta Country.

On the 8th of April 1822, the Collector wrote in reply to the letter dated the 26th of March, as follows.

The Native Government carried on this kind of work by employing the Inhabitants themselves, who received for such service merely their victuals or compensation for it, but sometimes indeed not even so much as that. It is about sixty years since, in the administration of Rhamajee Mahadeo, Sir Soubedar, that this work was last performed to any great extent. The villagers were brought from all parts of the Jurisdiction, and were allowed wages according to the distance which they had to travel, partly in money, grain, and sometimes in spirits, the value of which varied from about twenty-five to forty four reas per day, to each labourer.

That persons who reside in the village in which the Tank is situated, and who consequently would be materially benefitted by the works in question, should receive from Government a less compensation for their labor, as well as less than those who came from a distance, seems to be exceedingly proper, and acting upon these principles, should the Hon'ble the Governor in Council approve of the native mode of carrying on the work when it was conducted upon an equitable plan, I would take leave to recommend that the rates of pay should be as follows.

Each man who belongs to the village to which the work appertains, five Shoorais or thirty reas, each woman four Shoorais, and each Boy or Girl three Shoorais, per day.

Each man belonging to a village to which the work does not appertain, eight Shoorais, each woman six Shoorais, and each Boy or Girl four Shoorais, per day.

I would beg to suggest that laborers should not be brought further than ten miles from the work, for if they were to travel a greater distance, it would be necessary to extend the above scale, which, the more reduced it is, the less opportunity is there for abuse by the inferior public servants. It is for the same reason that I have proposed to divide the work-people into three classes only, on the works in their own, and of the neighbouring villages respectively.

On the 16th of May 1823 Mr. Chaplin, the Commissioner in the Deccan, replied to the letter addressed to him on the 26th of March 1823, as follows.

There is so little of artificial irrigation throughout the Deccan, that no general rules appear ever to have been established for making the repairs of Tanks. To the eastward there are few situations adapted for them, and in the Western Districts near the Ghauts the continued duration of the periodical rains supersedes the necessity of building such reservoirs. In general it may be stated in respect to Tanks, that when the land under them belongs to Government, all repairs of any magnitude required either for keeping up the cultivation, or extending it, are usually made at the public expense. When however the lands of Enamdars participate in the advantage arising from these disbursements, they are expected to contribute their quota of the charge. With regard to Wells, it has never however been the custom for Government, either to dig or to keep them in repair; the benefit of the light Assessment for the fields under them, enabling the Cultivators themselves, under ordinary circumstances, to support this expense. Government in its liberality has sometimes however granted remissions, or made donations where there has been a necessity for this indulgence. Petty repairs of the mud-work of Tanks, or of water-courses, are usually also made by the Ryuts when they can be effected by a day or two's labor. Where the work is very extensive, as in the case of some of the delapidated Dams of Khandesh, it can only be undertaken, I conceive, with the aid of professional Engineers; but where little skill is required, the practice which was formerly prevalent there, of assigning a portion of the land watered by means of such Dams, in Enam to the person undertaking to put them in order, might with advantage be revived. This practice was introduced with great

effect formerly in the Goorunkonda Talook of the Ceded Districts, a hilly country favorable for the construction of Tanks, of which there are now an immense number that are kept in repair by the descendants of those who constructed them; one third, or one half of the lands irrigated under them being held free of rent on what is called Duswund Tenure.

Mr. Thackeray informed me, that some inhabitants of Gudduck have lately offered to repair and extend a Tank in that village at an estimated outlay of Rupees 8,000, on condition of receiving in Enam one fourth of the land to be irrigated, a proposition which I agree with him in thinking extremely favorable, and which he in consequence proposes to accept. He adds, that in a few villages of the Southern Mahratta Country lands were formerly assigned to Wodors and others, for keeping Tanks in repair, but that after a few years the funds were misappropriated, and the duty neglected.

Lands granted for similar purposes in Khandesh have, it appears, lapsed to Government in consequence of the non-performance of the stipulations under which they have been granted, but Captain Hodges, with reference to the generally wretched condition of that Province for the last 20 years, does not consider the circumstance conclusive against the expediency of this mode of providing for repairs.

It is of great consequence to encourage people, by every possible means, consistent with the security of the revenue, to aid in these improvements. To this end no measure is more conducive, than that of granting favorable Cowls for a long term of years.

The following, in respect to Wells, are considered by Mr. Thackeray, as calculated to promote this object.

Expense of the Well.	Period for which the dry land Assessment only should be levied.
If from 125 to 250 Rupees, ...	Six years.
Ditto. 250 to 350	Seven ditto.
Ditto. 350 to 500	Nine ditto.
Ditto. 500 to 750	Eleven ditto.

When the expense is between 750 and 1500 Rupees, he recommends that one fourth of the land under the Well should be given in free Enam, and one third when more than 1500 Rupees is expended.

In order to encourage the repair of small Tanks, he recommends that the same principle be applied to them.

I shall now proceed to state, what appears to me to be the usuage actually prevailing, and the rules that are best calculated to promote these improvements.

Lands under Wells dug by Meerasdars in their meeras fields, are not in general subjected to any extra Assessment beyond the old rates. They usually continue after the improvement has been made to pay the dry land rate of Assessment, though in a few instances a small additional rent is laid on, which is called Wihree Hoonda. In Ahmednuggur and Khandesh the common practice is in Sirkar lands, for the Ryut at the time of digging the Well to solicit an Istawa for a term of years, which varies from five to ten, according to the labor and expense that it has cost in the construction, the rent rising gradually on the principle of an annual increase till the expiration of the period, when the full standard, which is higher or lower in particular Districts, becomes payable. In other villages again the agreement is, that the dry land rate of Assessment only shall be exigible for the first five or ten years, and the full rent at the end of the Cowl.

In meeras lands the old practice should ofcourse be kept up, the Ryut being permitted to enjoy all the profit of any improvements he may effect, without liability to any extra Assessment.

For the improvement of the Government lands it should be made the interest of people of capital, whether Ryuts, Merchants, or others to employ it in forming Tanks and Dams and in digging Wells, not only because these works tend greatly to improve the Revenue, and to augment the general stock and wealth of the country, but because in seasons of draught they materially obviate the miseries of famine, which at various times has desolated whole provinces of India.

The advantages to the held forth, must be made more or less favorable with reference to the quality of the land, and the facilities of the supply of water, since no general rule would strictly apply to all cases, embracing every variety of soil and situation, tend to secure the important objects in view, I think the following terms will be adequate subject to some little modification according to local circumstances.

On converting the dry land into wet, or garden, by digging Wells, the profit must be proportionate to the labor expended in procuring water. If the depth of the Well be from 15 to 25 feet and sides if it is solidly built up with stone-work, I would propose to give to the improver one fourth of the land so irrigated, in permanent Enam Tenure; and the remaining three fourths on Meeras Tenure, liable only to the Baghaet rate of Assessment of the District, to be gradually laid on, on the principle of an Istawa, which should extend to about six years—It is expected that the prospect of holding one fourth of the land for ever, free of rent, and the remainder on easy Meeras Tenure, will induce many persons to employ their money in agricultural improvement, instead of trusting it to the precarious security of native Bankers,

Where the depth of the Well dug varies from 26 to 40 feet, the greater expense of the work and of drawing up the water will require still easier conditions. In those cases 40 per cent of the land may be given in Enam, and the rest in Meeras, the full rent of which should not be levied till the expiration of an eight years Istawa.

The same principle might be extended advantageously, I think, to the construction of Dams : 25 per cent of the dry, thus converted into wet, being given in Enam, and Istawa Cowl for the remainder, extending from six to eight years, as might be judged expedient with reference to local considerations. I would also give the improver the benefit of the Meeras Tenure.

For diverting streams of water from rivers at a small expense, which can in favorable situations be done without constructing an expensive Dam, the proportion of Enam to be conferred might be limited to 20 per cent, and the Istawa for the remainder given for a shorter term of five or six years only.

For the formation of Tanks it would be necessary to give up 25 per cent in Enam of the land watered by them, and a Cowl on the Istawa principle for the remainder.

An Enam and a Meeras Puttur should be granted under the seal and signature of the Collector to persons completing these works. It should contain the conditions agreed upon according to the rules above described, and a stipulation, that all repairs might be made by the grantee.

It might also be stipulated, in order to guard against the non-performance of the agreement in regard to the repairs, that on the grantee neglecting to make them, they should be completed at the expense of Government and the proceeds of the Enam applied to defray the charge, that if the amount of the proceeds for five years proved insufficient to reimburse the Government, the half of the Enam should be continued to the Enamdar, and the half be resumed and annexed to the Government lands; the Enamdar being of course relieved from all future liability for repairs.

There is no greater source of abuse in any branch of the revenue expenditure than in that of Tank repairs. It is consequently desirable that it should, as much as possible, be left to the private interests of individuals to keep Tanks in order, due precautions being taken, that the means set apart for the purpose, are not gratuitously enjoyed, whilst the work is neglected. Individuals can execute such works at a smaller expense than can be done by the Government Agents ; and can better judge of the necessity of repairs, and the proper season for making them. The heads of villages always recommend repairs, for if they can derive ever so little profit from them, they care not what may be the expense to Government. In all undertakings of this sort conducted by the

public servants, the chief frauds committed are in the enhanced rates charged for labour and materials. The best check consists in calling upon the public officers for tables of rates of hire, and prices current, which should be frequently furnished, and their accuracy ascertained by the Collector's enquiries. Earth and stone-work must however vary in price, the former according to the hardness or softness of the soil from which it is dug, and the latter with reference to the facility of excavating the quarries and the distance from which the stone is brought. This uncertainty of price leaves open a wide door for malversation on the part of the servants of the Officers under whom the repairs are conducted, and I therefore think, that in such cases they should be made by contract. Frauds too are often attempted in the measurement of the work executed, but these may in general be defeated by the vigilance of the European Superintendent.

In regard to the proportion of assistance exigible from the villagers in repairing Tanks, it may not be irrelevant to mention the customs which prevail in some of our old Provinces, and which, where they exist, it may be useful to maintain elsewhere,

When the monsoon continues, rains set in heavily, and the village Tank is quite filled, the whole establishment of village servants (including the Tullaree and "Neer Guntee") (or person who distributes the Tank water) are expected to repair to the Bank of the Tank, and to remain there night and day, for the purpose of aiding in securing the embankment as long as any danger remains of its bursting. If the danger is immediate in consequence of the Bank beginning in any place to give way, the whole of the inhabitants of the village ought to contribute their assistance in throwing up earth, branches of trees, sticks, and other materials to prevent its breaking.

They are also expected to aid in repairing the water courses which supply the Tank whenever the water is lost to the Tank by their bursting, and whenever the supply is excessive, so as to endanger the safety of the Tank, they should assist in turning off the water from those channels.

Should the precautions for securing the Tank fail, it is usual to break down a part of the embankment in the shallow part of it near the sluice, in order that the superfluous water may be more easily discharged.

When the Tank more gradually fills, and the Bank is not in any danger of breaking, it is customary, with a view to secure as much water as possible, to stop the overflowing from it at the sluice, by means of Jowaree or other straw, branches of trees, &ca. In this case the materials are furnished by each Ryut, in proportion to the amount of his rent.

When the Tank becomes nearly dry, and the little water that remains is in a hollow, so that it no longer flows to the fields below,

the Ryuts unite their labour in digging a channel, by which to draw it off.

The channels by which the fields are irrigated, are always kept clear by the Ryuts interested.

Whenever repairs are made by the villagers, each house contributes one or two Pickaxes, and Shovels, but in some cases the proportion of aid has reference to the number of Ploughs in each family. Local usage determines the point. The labour contributed by individuals seldom exceeds that of three days, though from ten to fifteen is not uncommonly exacted when the Patel has authority and influence in the village.

Persons refusing to contribute their aid in time of need, are deprived of their share of the Tank water.

All petty repairs of Wells, as well as Nullahs, are made by the villagers.

Copies of the answers sent to me by the several Collectors, on the subject of repairs of Tanks, Wells, and Aqueducts, are herewith submitted for the information of Government.

The following are the Reports of the several Collectors in the Deccan, and the Resident at Sattara, alluded to in the foregoing letter from the Commissioner.

From Captain H. D. Robertson, Principal Collector of Poona, dated the 10th of March 1823.

There are few, I may almost venture to say, no Government village Wells or Tanks in this Collectorship. It is not incumbent on Government as a duty *it ought to perform*, to dig Wells or Tanks for villagers, neither is it so to repair those already dug. Instances have been mentioned to me of sums of money being given as a matter of great favor by the first Parishwas on occasions when they might be travelling near the villages badly off for water, and too poor to be at the expense of making or repairing Tanks or Wells themselves. Donations of this kind if intended to be given by our Government, might be presented as a special favor by yourself, or the Hon'ble the Governor during your circuits. Collectors might previously, acquire information, and submit lists of poor villages most in want of water, and which could obtain it by such pecuniary assistance so that by referring to them the donor would be able to judge of the propriety and amount of any gift. Were Collectors to recommend and obtain presents of this kind, the practice would soon be looked upon by the country as a duty Government ought to perform on every repre-

sentation of the necessity, and Government would thus become saddled with an outlay, which I am quite certain, no village will at present seriously demand, excepting as a great favor.

From Major H. Pottinger, Collector of Ahmednuggur, dated 14th March 1823.

I beg to inform you, that there has never been, as far as I can discover, a single instance in the Districts within this Collectorship of the Government having repaired, or cleaned out a Tank or Well, and that in the places where private individuals have built such, they have occasionally been put in order and cleaned out by the combined spontaneous exertions of the villagers. This has however been very seldom the case, and there is perhaps not one work of either description throughout the country that is not in a state of complete decay.

Should Government at any time consider it advisable to turn its attention to the repairing and cleaning the Tanks and public Wells in this part of the Deccan, the only mode that appears to me to present itself is to do the work, if it is extensive, by the hands of hired labourers, who will be speedily collected ; but should it not be of such importance as to require this precaution, I dare say the villagers in the neighbourhood of the Tank or Wells, would undertake the task of clearing and putting it to rights, on being assisted by a few of the class of persons called "Beldars" or native Pioneers in the pay of the public.

From Captain H. W. Hodges, Assistant Collector in charge of Khandesh, dated the 13th March 1823.

I am not aware of any fixed practice in this respect, which has prevailed universally throughout the Paishwa's country, but in many parts of Khandesh lands have been granted in Enam, on condition of the holder of them keeping in repair certain Dams and water-courses, and this mode of keeping in repair works of this nature, when it can be adopted, appears as good or better than any other which occurs to me. The lands granted on this account in Khandesh, have certainly reverted to Government, it may be presumed, from the inability of the holders of them to perform the conditions on which they were granted, but such has been the state of the country for the last twenty years, that I cannot consider this circumstance a proof that the measure itself is ill calculated to answer the purpose for which it was designed. I do not learn that any measures have ever been adopted by the Mahratta Government for keeping Wells in repair; Enam lands have sometimes been granted to those who have dug and built

them, but the more ordinary encouragement for sinking common Wells in villages has been to continue for a certain number of years, for the lands watered by them, the same rate of Assessment which they bore before they were irrigated.

From Captain John Briggs, Resident at Sattara, dated the 22nd of March 1823.

From all the information I can obtain it has always been usual for the Government itself to incur the expense of repairing Tanks and Wells, excepting in cases where the annual amount was so small as to enable the Ryut to contribute for any partial repairs.

I am of opinion that the best mode of conducting public works of this nature would be, to have the works inspected by some professional architect, who should be required not only to give in, the estimate of the requisite repairs, but to shew clearly by plans and elevations. the present state of the work, and the nature of the requisite repairs, a subordinate agent of the architects might be kept on the spot to superintendend the work and the labour, and materials to be supplied by the civil authority on the Superintendent's requisition. The Bills for the materials and labourers to be passed only under the Engineer's signature.

Whenever Government is resolved to enter upon the repairs of the numerous Dams, Aquiducts, Wells and Tanks in the Deccan, I shall recommend that some Officer be appointed especially to this very important duty.

From Mr. Thackeray, Principal Collector of Darwar, dated the 4th April 1823.

Owing to the small extent of artificial irrigation in this District, no general rules seem to have been ever observed with respect to the repair of Wells and Tanks. When the lands watered by them belong chiefly to Government, repairs are usually considered as a public charge being necessary, either to keep up the ordinary cultivation, or to increase the extent of it; when however the lands of Enamdars benefit by the repairs, they are expected to contribute in proportion to the advantage they derive from improvements.

Trifling repairs of mud-work, only requiring a few days labour from the Ryuts, should be borne by the village, care being taken by the Amildar to prevent neglect, and to afford assistance when necessary.

All repairs of a more expensive nature must be borne by the Government in poor villages; in rich ones the terms of Cowl

held out to those who build Wells and Tanks, promise every encouragement. In particular situations even greater liberality may be expedient. Some inhabitants of Gudduck have lately offered to repair and extend a Tank in that village. The expense is estimated at Rupees 800, and they ask a Duswund Enam of one fourth of the land to be irrigated, such undertakings should be encouraged, and I propose to accept their terms. In a few villages of the District, lands were formerly assigned to Wadurs and others, for keeping Tanks in repair, such Enams provide permanent funds for the purpose, but after a few years they are usually misappropriated and the office becomes a sinecure.

Copies of the foregoing letter from the Commissioner in the Deccan, and of its enclosures, were sent to the several Collectors in Guzerat and the Concan, with a circular dated the 21st of June 1823, calling on them to furnish any information they could obtain on the practice in the Districts under their charge, and requiring their opinions how far the measures suggested by Mr. Chaplin for encouraging such works are adapted for introduction into their respective Zillahs.

On the 31st of March 1824, Mr. J. H. Cherry, Collector of Ahmedabad, replied to the circular of the 21st of June 1823, as follows.

The Tanks in the Cusba of Dhundooka were built at private expense, but it was customary under the former Government for the Kamavisdar, and where there were Tanks, for the Patel, to call upon the inhabitants, to afford their labour for any trifling repair that they might require.

In villages belonging to Gametees, the expense was defrayed by the inhabitants and the Gamety.

In many parts of this Purgunnah the lands are irrigated from what are called Cutcha Wells, which are in fact, holes dug every year to the depth of 8 or 10 Haths from the surface of the earth, and the expense of which does not exceed 8 or 9 Rupees. No assistance was afforded from Government in case of Wells being built on the banks of rivers where water was to be got at 15 Haths depth: but where it was not to be found under 20 or 25 Haths, the land irrigated was exempted from Assessment on the Rubbee and Oonalloo crop, for as many years as might be necessary to reimburse the person undertaking the work, and the expense incurred on it.

The same principle was observed for the repair of Wells.

Tanks, the water of which was drank by the inhabitants of the village, were kept in order at their expense where the repair might have been within their means, otherwise some assistance was afforded by Government.

In cases where the water was used for irrigation, exemption from Assessment was allowed, or an Istawa Cowl granted, fixing a light Assessment on the land brought into cultivation, until the outlay was reimbursed.

Tanks not used for either of these purposes, but built from charitable, or less pure motives, for the use of travellers and cattle, were dependant for repairs on the same motives that caused them to be built.

The same practice was observed in this Purgunnah for the building and repair of Wells as in those of Dhundooka, Goga, and Rampoor.

The repair of Tanks in the Duskrohee Purgunnah was made by the inhabitants, but if the expense were heavy, the Government would sometimes afford its assistance, by allowing a deduction at the time of settling the Jumma for the year.

For the building of Wells, Cowls were granted, exempting the land from Assessment on the Oonalloo and Rubbee crops for 5, or 6 years, the same principle was observed for their repair.

In the Veeramgaum Purgunnah in no instance does it appear, that the late Government encouraged the building, or repairing of Tanks or Wells by affording its assistance, whether by a grant of land or money, or exempting the land brought into cultivation for a time, from Assessment.

The short distance from the surface at which water is to be found in many parts of the Purgunnah, and the facility in consequence of procuring it by means of Cutcha Wells, as well as the neglect, and inattention to the interests of the Purgunnah by the district officers of the late Government, may account for this circumstance.

The only instance known, in which assistance was afforded by the Government in the Purantage Purgunnah, was in a grant of Rupees 50 each by the Murwary and the Guikawar Government towards discharging 300 Rupees, the expense of repairing the Panks Sujra.

It does not appear, that the Government for many years afforded its assistance for the building or repair of Wells in the Purantage district, not even by allowing an exemption from Assessment of the land on which the Oonalloo, and Rubbee crops might be produced, but in those of Morassa and Byeed, where cultivation by irrigation is carried on to a greater extent than in Purantage, land which produced those crops, was exempted from Assessment for one or two years, to one or two persons, thro' whose exertions several vil-

lages have within the last 20 or 30 years been established in the Purantage Purgunnah, have only taken a tenth of the produce for four years from persons building Wells of Bricks and Chunam, and at the expiration of this time the usual share of an eighth.

It will be observed from the above summary of the practice under the native Governments, that in no instance has land been given in Enam for the encouragement of works of this description; for the foundation of Tanks, which require a considerable outlay of money, it might perhaps be advisable to allow the person undertaking the work a proportion in Enam of the land brought into cultivation: but in this part of Guzerat, I should rather be disposed to afford encouragement to the building of Wells, as they are less liable to injury, and from being less expensive, are within the means of most Coombies to undertake the work. I do not however think it necessary to grant land in Enam for the building of Wells, the terms which I have mentioned as being in use, together with the increased value which having a Well on it, gives to the field, the right of cultivating which remains with the family, holding out a sufficient inducement for the undertaking of such works.

In those Districts of the Zillah which have been for some time in our possession, as well as in that of Duskrohee, Coombies readily undertake the building of Wells on the terms of the Rubbee and Oonalloo crops being exempted from Assessment until the expense is defrayed, and I should beg to suggest that Cowls on the same favorable terms be given in the Purgunnahs of Veeramgaum and Purantage.

In the latter District exemption from Assessment of these two crops for four years, is considered as affording on the part of Government, the requisite degree of encouragement, I would therefore limit the terms of the Cowl to this period, the land being of course subject to the usual Assessment on the Kureef produce.

On the 20th of September 1824, Mr. Boyd, Officiating Collector of Broach, replied to the circular of the 21st of June 1823, as follows.

The measure of granting Cowls for a long term of years to such persons, as propose the improvement of public Wells or Reservoirs appearing to me to be at variance with the established usage in this Zillah, I cannot consistently recommend its adoption, and the same objection presents itself in respect of grants of land in Enam for such works.

The streams, or such at least as are perennial, being mostly affected by the influence of the tides, cannot in my judgment be usefully directed to agricultural improvement, and indeed such

an undertaking would be a task of herculean magnitude, considering the height of their banks and the constant change in their bottoms, continually shifting either from the influx of mud from the sea, or of beds of sand, or gravel from the land.

In stating these objections, it is fitting, that I should at the same time express my decided concurrence with the Commissioner as to the importance of the employment of capital in the improvements noticed: such an outlay, however, can be the growth of time and civilization only, and in the interim, it is right that the constituted authorities on the spot should use every exertion to foster and improve the old and understood system, which has been found efficient hitherto.

In conclusion I have the honor to state, that this District appears to me to be as well stocked generally with Wells and Tanks as any other in which I have ever resided, and that whatever improvements may be desirable, should be done by degrees in the established manner, rather than through the assistance of the Treasury, which I do not incline to recommend in any case, unless it be such as admits of little doubt of the correct application of the money to the object contemplated.

On the 24th of May 1824, Mr. E. B. Mills, the Assistant Collector in charge of Kaira, replied to the circular of the 21st of June 1823, as follows.

As artificial irrigation is not carried on in this Zillah by means of Tanks, no fixed rules have ever been laid down for constructing, repairing, or cleaning them out.

I may indeed observe, that excepting Tanks situated close to villages, few others are to be traced, and those not of a description that could be rendered available during the Rubbee season, and in no instance does it seem, that they have been constructed, or in any way built up with a view to being applied to agricultural purposes.

With regard to Wells, their construction has at all times been encouraged by Puttas from the Collector on favorable terms, and wherever repairs to them of any consequence have been requisite, abatements of Revenue to Patells or others have enabled them to execute such undertakings.

There are altogether in this Zillah 2,423 Wells, 170 of which are applied to village purposes, and 108, from their delapidated state, are entirely useless: it is difficult to say, how many of the above number have been built since the country came under our management, as there is no correct data to judge by, 41 only have been constructed since 26th November 1819, when the following Putta was framed out by Captain Robertson:

That the profits of the land irrigated, after paying the usual dry rate of Assessment, are to be applied for a certain number of years be defrayed, the expense of building the Well : at the expiration of this period a Punchayet is to assemble and fix a Begotee with reference to that paid on similar land in the neighbouring villages.

The builder of the Well after paying the dry rate of Assessment, to be entitled to *one fourth of the profits* arising from the land irrigated.

The result of the above clearly shews, that it has by no means been attended with that success which doubtless was anticipated, and since it appears in every respect inadequate to promote the object under consideration to the extent that could be wished, it is certainly highly desirable, equally with a view to increase the public revenue, and general prosperity of the country, that terms more advantageous and permanent should be held out to engage the interests of monied men, and stimulate Patells and others to make every exertion towards agricultural improvements.

Referring to the 13th and 14th paragraphs of Mr. Chaplin's observations, I feel persuaded, that if the suggestions there offered were adopted in this Zillah, the most important advantages would be gained ; the circumstance of giving up one fourth of the land brought under irrigation in permanent Enam, and the rest on easy tenure for a few years, would doubtless operate, as a great inducement to all classes to come forward and engage their resources so profitably.

I may remark with respect to Dams, that where they exist in this Zillah, they are only of a temporary nature, and if regularly built up, must be to the detriment of other villages watering their lands from the same channel.

On the 29th of March 1824, Mr. W. J. Lumsden, Collector of Surat, replied to the circular of the 21st of June 1823, as follows.

There may be in some parts of the Zillah in which a few persons might be found who would be willing to undertake Wells on the terms mentioned in the 6th paragraph of Mr. Chaplin's letter, and which would be advantageous to Government.

In most parts of the country however, the land is so valuable, that the terms would involve considerable loss to Government, who might better sell land and expend the purchase money on Wells.

There is no disposition, speaking generally, in the people here, to engage in agricultural improvements of the nature contemplated at their own charge, I have received numberless applications for Wells, and repairs to Wells and Tanks, but only one or two in which persons have proposed to make them at their own charge, in

consideration of receiving land, and had such a disposition existed, I should have respected such proposition or tenders.

The building of Pucka houses is comparatively not uncommon.

Very few people make Wells from motives of charity, or for handing down their names, and these now come forward and receive the stipulated land, and a few cultivators without leave, make Wells and claim the charges incurred, and these are almost the only Wells made, except at the public expense.

It would seem to me, that if there should still exist any doubt how far private speculation in this way could be procured in this Zillah, it might be worth while to invite general tenders, although from what I have stated, I should not expect much effect. Upon the whole, the natural system here, is, for Government to lay out the money, and offer the improved land to the Ryuts on easy and liberal terms, rather than to attempt to force private adventure into channels to which it is averse, at any heavy sacrifice of the public revenue, and more especially unless where the Ryuts themselves are disposed to become the speculators.

The following is an extract (para. 42) from a letter from the Hon'ble the Court of Directors, dated the 23rd of May 1827.

There can be no question about the expediency of constructing Tanks and Wells when there is a satisfactory prospect of their being attended with adequate advantage. There can also be no doubt as to the policy of disbursements by Government on that account, where the whole of the rent, or so great a portion of it is received by Government, as is received by it in almost every part of India.

It is much to be regretted, that so many difficulties stand in the way of the great improvement which the better providing of Tanks and Wells is calculated to produce. The poverty of the cultivators generally leaves them without the means, and an Assessment, variable from year to year, or at short periods, withholds from them the motives, to effect any expensive improvements, which therefore must be made at the cost of Government, or not made at all; and if they are attempted to be so made, it is but too probable that the funds will in great part be wasted. It is highly proper that you should direct the attention of the most intelligent of your local Officers to the devising of a plan for the attainment of this object. Our wish is to call your attention to the subject, and to indicate the points on which, in our opinion, your consideration will be most advantageously bestowed.

The following is an extract from remarks made by Colonel Thomas Munro, on a draft of a Ryotwar Regulation, and is taken from page 881 of the Madras Revenue Selections, page 881.

Persons building Tanks at their own expense should pay only from one half to two thirds of the full rent of the extra land brought into cultivation by means of such Tanks; or they might be permitted to enjoy from one third to one half of such land, rent free. The passion for building Tanks is so great among Hindoos, that they are often satisfied with one fourth, or even one fifth, of the land watered by one; but the consequence generally is, that their successors are unable to keep up the necessary repairs from such slender means, and that the work goes to ruin. Substantial Ryuts often engage in Tank-building, miscalculate the expense, sink their whole property, and leave the work unfinished. New Tanks are not so much required as the repair of old ones, for in most Tank districts there are already as many as, or more than, are adequate to the wants of the present population. There can be no doubt but that the adoption of the principal, that the Assessment, when fixed, shall not be raised when land is improved by Wells, Tanks &c. at the expense of the Ryut would, in all districts be favorable to the Ryuts, and to the ultimate increase of the revenue; but in some districts, in which numbers of new Wells and Tanks might be dug to advantage, it might for many years reduce the present amount of revenue, by gradually withdrawing the cultivators from the old, high rated, to the new, low rated, lands. There are, however, but few districts in which this effect would be much felt, and the principle might perhaps, without any danger, be extended to all. Should it however be thought unsafe to introduce it generally without longer experience, the terms which it has already been proposed to allow for improvements by Tanks, Wells, &c. might be adopted to advantage.

Mr. Norris, one of the Members of the Committee for revising the Judicial Code, addressed the following letter to Mr. Secretary More, on the 18th of February 1825.

In looking over the Madras Revenue Selections while engaged in considering the drafts of the Revenue Regulations and the remarks upon them, I have observed, that it was proposed at Madras, as appears from Section 28 of the Ryotwar draft (page 876 Madras Revenue Selections) for the purpose of encouraging Well cultivation, that lands watered by Wells, sunk subsequently to a specified date, should be subject to two thirds only of the ordinary Assessment on irrigated land. I heard also sometime ago, but I know not whether this was the case, that this encouragement was afforded, but that it was subsequently found necessary to discontinue it, as the Ryuts deserted the old Wells whichwere still subject to the high Assessment, and used only new Wells subsequently sunk

on more favorable terms, so that the revenue suffered a diminution.

2. It has occurred to me, that a stimulus to the advancement of agriculture, similar to that above mentioned, might be held out without occasioning any sacrifice to Government, by an arrangement which should gradually bring the old Wells upon the reduced scale of Assessment in proportion as new Wells paying such reduced Assessment where sunk, and I have the honor to submit the sketch of a plan for that purpose, with a few notes explanatory of the objects of its separate provisions.

3. In the event of the plan being thought worthy of the attention of Government, I must observe, that the amount of the reduction of revenue has been taken at random, and that various alterations in the detail would probably be found necessary, in order to render it reduceable to practise in any considerable extent.

The extension of Well cultivation is so obviously and so highly beneficial, that it would be a waste of words to recommend to Government any plan by which such a result was likely to be produced. But independently of the advantages peculiar to Well cultivation, it may be observed, that any plan by which the Assessment is lowered, must, by increasing the subject's proprietary right in the land (or creating it, where in consequence of high Assessment, none is in existence) occasion a stimulus to agriculture and population, foster industry, prudence and enterprize, and in a word ameliorate, to the extent of its operation, the condition of the agricultural community, at the same time that it will give stability to the revenue, lead to its increase, and facilitate its realization.

5. If at any future time it were thought desirable to reduce the Assessment on land not watered by Wells, such reduction might, I think, if there were uncultivated land of good quality and in sufficient quantity, be gradually effected under a set of rules on the basis of those contained in the sketch, by which the diminution of the revenue derived from the old cultivated land should be made up with a moderate addition from the land brought under cultivation subsequently to a specified date. But such scheme would necessarily be more extensive than the present one, would lead to greater detail, and require greater vigilance in its execution.

P. S. I find that Mr. Thackeray, in his report of the 4th October 1817 (page 862, Revenue Selections), represents the effect of the encouragement afforded for sinking Wells, as I have heard it to have been.

Sketch of a plan for encouraging and extending Well cultivation by gradually reducing the Assessment without causing an immediate sacrifice to Government.

To be provided 1st. That a register of the Wells of each village be framed, the Wells to be specified respectively by names or marks: as for instance, by the letters A, B, C, D, E, F, &c.

2nd. That proclamation be made, that any person hereafter sinking a Well under the following rules, will derive the advantages therein specified.

3rd. The Well must not be sunk on land already watered by another Well, and paying revenue accordingly.

4th. The Well when sunk, shall be reported by the owner to the Tullatee for registration, as a subsidiary Well to one of the principal Wells A, B, &c. the subsidiary Well to the principal Well A, being for instance registered as the Well A, a.

5th. Provided however, that previously to such registration and its attendant advantages, as hereafter stated, being granted, the new Well shall be adjudged by the Collector, on investigation by him, or a subordinate revenue authority, to be most fully adequate under the reduced Assessment hereafter mentioned, to ensure with ease the regular payment of a revenue amounting to at least ¾ds of the revenue paid by the land watered by the principal Well.

6th. That the land watered by each approved subsidiary Well, and by its respective principal Well, shall be assessed only at the rate of ¾ds of the present Assessment.

7th. That when a subsidiary Well to each principal Well in the Village has been sunk, lands watered by Wells, in whatever manner sunk, shall be assessed only at the rate of ¾ds of the present Assessment.

NOTES.

3rd. This rule is made in order to prevent a man from claiming a reduction of the Assessment on irrigated land without bringing other land under irrigation.

5th. The Well ought, before registration, and the reduction of the Assessment, to be pronounced, such as to secure the Government the object in view, that is, the regular payment of a moderate increase of revenue, by means of a reasonable Assessment. If the revenue is not a little increased and paid with much greater ease, the Assessment might as well remain upon its present footing.

6th. Every proprietor of a principal Well, will, under this rule, have a double inducement to dig a Well, to that which operates on any other individuals, this does not seem unfair, because his property ought not to be depreciated, which it would be, if he could not bring his Well upon the more favorable rate of Assessment, nor is it injudicious, because the possessors of Wells are likely to have

more capital then other individuals of the agricultural class. If the proprietor of a Well cannot afford to dig a subsidiary Well, he will ofcourse be most willing to make an agreement with any capitalist to dig one by dividing the advantages to be acquired.

7th. The principal Wells having been all brought under the reduced Assessment, there is ofcourse no longer any necessity for these rules being observed: there would be no longer any inducement for a man to abandon an old Well, under the encouragement afforded for sinking Wells.

The following is the Section in the Madras Revenue Selections, which is alluded to in the first paragraph of the foregoing letter.

28. When land may be held on Cowle for a term of years, the rate of Assessment of the last year of the Cowle shall be considered as the future fixed rate of Assessment, except in the following cases.

1st. When a person may excavate or sink a Well and make a new Garden, he shall at the expiration of the term of the Cowle, enjoy one-third of the land or produce free from tax; that is to say, he shall only pay two-thirds of the full revenue which such land would otherwise be liable to pay.

2nd. When a person may construct a new Tank for the irrigation of lands, he shall receive from the Governor in Council, as a testimony of their approbation, and an encouragement to others to follow his example, a grant of the public revenue of———of the land newly brought into cultivation, that is to say, he shall pay only ———of the full revenue of the land watered from such Tank.

The following is an extract from Mr. Thackeray's report, which is referred to in the Postscript of the foregoing letter from Mr. Norris.

Many old Wells have been deserted, many have been dug since the survey. There are more Wells now than under the Native Government, but the amount exacted under the Native Government was perhaps double the survey rates. The reduction of Teerwa has therefore produced more Wells, and in fact more revenue for the country in general, and in the long run, the revenue benefits generally by the greater number of Wells, even at half the old Assessment, because the produce of the country is generally so much increased and secured by the additional number of Wells. A Well on a Putcut farm may enable the Ryot to pay the Teerwa on his other dry land in a bad year. The old Wells deserted have gone to decay, chiefly from the burthen of the Assessment; a few from unfavorable situation, and from the water failing, and more from the owner disappearing. Nobody but his heir will take the

Well, because according to the custom of the country, the owner or his heir may reclaim possession. The increased number of Wells since the survey seems almost entirely owing to the comparatively low Teerwa. The Teerwa on Well, as well as all other land, under the native Government, and indeed in all parts of India, was fixed at a share, or supposed share, of the produce. Land under a Well was supposed to produce three or four times as much in the year as the same extent of dry land, therefore it paid three or four times as much. The stock and labour employed was not, perhaps, sufficiently considered; at all events, the number of Wells dug since the Teerwa was lowered, shews the good effects of a low Teerwa. There are many other considerations which operate to induce the Company to refrain from modes of Assessment, which might have answered well under the native Government. Here the advantage of simplifying accounts, seems to me alone to compensate for the supposed sacrifice of revenue. I do not know exactly the expense of digging, and the capital required to work a Well. Suppose it only fifty pagodas, the interest, and additional Teerwa would come to twenty-two per cent per annum on that capital: supposing the capital less; the Teerwa would be still a higher tax upon it. Tuccavi has been advanced to Ryots, undertaking to dig Wells: it would be better to leave them to dig and enjoy fully the profits of the Wells. It is more difficult to calculate the profits and clear rent of a Well above those on dry land. If the Ryot works his own Well, he gets the farmer's profit, and most of the wages of labour besides the rent. Well lands are not perhaps, so generally rented to farmers by the owners as to afford data for calculating the rent, but from what enquiries I have made, it seems that the owner's rent very little exceeds the interest on the cost of digging the Well. The present rates, therefore, certainly do not offer too much temptation to this mode of employing capital: on the contrary, in this, as in other countries, money and labour laid out on land generally bring less returns than in other lines; but then this is more secure and pleasing. The additional Teerwa on gardens is, in fact, an income tax. Giving up this income tax is inviting capital into this mode of investment; and the most unfavorable view of it, is only offering a bounty to new Wells, which some may think unnecessary, but a bounty to a species of improvement which cannot be too much encouraged. The number of Wells might perhaps be doubled, the produce of the country and revenue proportionally augmented and secured. When they can pay more revenue easily, it will be easy to find expedients to get more from them. The present object is to secure the present revenue; by-and-by it may be the object to increase revenue. Nothing is more likely to secure the present, and enable the people hereafter to pay more revenue, than, a greater number of Wells, than giving them a full sense of property in their Putcut lands, which they cannot well feel while subject to the continual interference which the claim to additional Teerwa for new, and the extension of garden

cultivation under the old Wells, and other improvements, must produce. I do not recollect any case in which I would raise the payments of the Ryots, except where Poonjee or garden, may be converted into Nunjee, by water from Circar Tanks or Watercourses. Here the Circar is at the expense of bringing the water, and should immediately get the difference of rent. It may be said, some of the old Wells will be deserted and the revenue lost and the Government ought to be allowed to make up the loss on the new Wells. It may be answered, this is only a part, and a very small part, of the present annual losses, which it is hoped a greater number of Wells would in a degree and in time, with the other advantages to be given to the permanent Ryots, altogether prevent. Ofcourse it is the same to the Government, whether the revenue, as long as it does not fall off, is brought to account as garden, or dry, or wet land; it is not necessary to keep a running account of Wells, and have the new as a set-off against the deserted Wells. In most cases it would not be so much a sacrifice of revenue as a favorable bargain with the Ryot, giving him up the difference between the present Teerwa and that to be imposed on his future improvements, to induce, and so far enable him to pay his present rent regularly: it would be so far like ensuring the present revenue. If a permanent settlement is made with the Ryots, it is probable many new Wells will be dug and some old may go to decay, and possibly on the same estate. The whole estate will be rendered more valuable, some parts more than others.

Copies of the foregoing letter from Mr. Norris and of its enclosures, were sent to the Commissioner in the Deccan, and to the several Collectors in Guzerat and the Concan on the 28th of February 1825, with a circular, calling for their opinions on the plan, and as to its applicability to the local circumstances of the Districts under their control respectively.

Mr. Chaplin, Commissioner in the Deccan, replied to the circular, on the 17th of March 1825, as follows:

1 A regular register of Wells, under which there is any cultivation, is already kept in all villages, they usually have names affixed to them, but when this happens not to be the case, the deficiency can be readily supplied. There are generally some objects near the spot which give names to Wells, such as the Tamarind Tree Well, the Margoza Tree well, or the name of the Founder of the Well, attaches to it, such as, Yengunas Well, &c. This style of designation being consonant to usage, is preferable, in my opinion, to any alphabetical innovation.

2. I apprehend that the rules suggested as they now stand, are not likely to give any great encouragement to the digging of new Wells in the Deccan; at present wherever the Meeras tenure prevails, a Ryot digs a new Well if he pleases, without in general, any addition being made to his Assessment; or if an addition be made, it is a trifling case called *Wihree Hoonda*. The rules therefore cannot be applicable to such lands; as the old practice, so much more favorable must ofcourse be maintained.

In other lands not Meeras, a person already having one Well and digging a subsidiary one, by which he can bring a further quantity of land under Well cultivation sufficient to yield two thirds of revenue of the land of the principal Well, will certainly in good seasons derive a considerable profit from the proposed settlement, but good seasons in the Deccan are not to be depended upon, and there are very few Ryots sufficiently substantial thus to extend their Well cultivation, even on terms still more indulgent than those offered,

4. If the generality of persons already having Wells, are likely to be unable to avail themselves of the indulgence of reduced rent thus held out, it follows that those who undertake to dig new Wells without having previously any other Well cultivation, would not have a sufficient prospect of advantage under the plan subgested to reimburse their loss of capital.

5. When Wells are most wanted in the Deccan, it is often requisite to excavate to the depth of from 20 to 40 feet at an expense of from 300 to 1000 Rupees; and in this case the interest of the money disbursed would absorb all profit, unless a very long Cowle, exempting the speculator from rent for a course of years were granted.

6. Even to those who have Wells and dig subsidiary ones, the reduction proposed would not always make up for the losses arising from failure or deficiency of crops, which are by no means uncommon, even in this kind of agricultural speculation.

7. The former native practice in the Deccan was to grant a portion of the land, as Enam, to those who made expensive improvements, such as forming dams across streams and embankments to prevent inundation, or who removed rocks and brought into tillage land never before productive. On the plan suggested by Mr. Norri's it is to be feared the abatement of one third of what would be the rent of Well land would not be perceptible to the speculation, whilst a share of the field on the native plan is an obvious tangible property which is never lost sight of, if acquired by means of borrowed capital, it can be mortgaged for the payment of the debt, and reverts to the owner when the debt is liquidated.

8. If Mr. Norris' plan holds out but little chance of profit to the Ryot, it holds out still less to Government in my opinion. It

is hardly necessary to shew this by figures, because they must be in some degree estimated calculations: but I think they would go far to prove, that the scheme has little or no chance of success, until modified, as proposed in the 3rd paragraph of Mr. Norris' letter.

9. On the 16th May 1823, I offered to Government a few propositions for giving encouragement to Well and Tank cultivation, which I think well calculated for that object: not having been favored with the opinion or orders of Government on these suggestions, they have not yet been acted upon; on a consideration of them, they may perhaps be considered serviceable, and may possibly be combined with some modification of the rules suggested by Mr. Norris, which by further abatements might furnish the stimulus so much wanted to the advancement of this branch of agriculture, of all others deserving to be promoted for the benefit it holds out in seasons of drought and scarcity.

A copy of the foregoing letter from the Commissioner in the Deccan, was sent to the Committee for Revising the Regulations, on the 13th of March 1825, and on the 16th of April 1825, the Committee addressed to Government on the subject as follows:

As Mr. Chaplin's observations (which are offered as relating only to the Deccan, and will be found probably less applicable to other districts) are confined principally to the detail of conditions contained in the sketch of the plan, we shall commence with stating, that those specific conditions were not expected to be precisely such as ought to be established in any part of the country, and by no means in all, the only object in view being to make known the principle of the plan proposed, and it is our opinion, that under this, or any other plan, the Revenue Officers of Government should under its directions and control respectively, establish such specific conditions as may seem suitable to their respective districts. It may perhaps, upon investigation be found, that the sacrifice, $\frac{1}{3}$rd of the revenue of land irrigated by an old Well, and the ordinary revenue previously derived from the land irrigated by a new Well, would in some districts, more than equal the additions to the revenue produced by the new Wells, such a circumstance would shew it to be necessary to substitute $\frac{3}{4}$ths, or some other proportion for $\frac{2}{3}$rds, which, as stated in Mr. Norris' letter above mentioned, was not taken upon any particular grounds, but only because some proportion was necessary to shew the principle of the plan, and this proportion occurred in the draft of the Ryutwar regulation, framed by the Madras Board of Revenue.

Upon the first paragraph of Mr. Chaplin's letter, Mr. Norris is desirous of explaining, that he never contemplated the registering Wells under letters instead of their local names; he used letters in the sketch of the plan which he had the honor to submit to Go-

vernment under date 18th February last; as being convenient for his purpose at the moment, but without in the least anticipating, that in the native registers letters could be used, independently of the objection so justly stated by Mr. Chaplin, and the absolute inutility of the innovation, the native alphabets are generally unsuited to such a specification.

Mr. Chaplin's 2nd paragraph proves satisfactorily, that no further encouragement beyond what at present exists, can, or need be given to the construction of Wells upon land held on the Meeras tenure.

The 3rd to 6th paragraphs seem to evince the necessity of more favorable terms being offered in the Deccan, and there is probably no better way of improving them, than that of exempting the newly irrigated land from rent during the term of a long Cowle, as suggested in the 5th paragraph. If at the end of that term they were to be subject to a reduced Assessment, and in case that reduced Assessment equaled ⅔rds (or any other proportion calculated to secure an increase, or at least no reduction of revenue) of the Assessment of an old Well, when such old Wells were also brought upon the reduced Assessment, a stimulus would be afforded, which would operate against the abandonment of the old Wells; the effect which Mr. Thackeray (page 862, revenue selections, paragraph 14) represents to have been produced by a bare encouragement for the construction of new Wells, without reference to the effect which that encouragement was calculated to occasion upon the employment of the old Wells.

We are not certain, whether the unfavorable effects of bad seasons upon Well cultivation are not represented by Mr. Chaplin as greater than might have been expected; the injury to the Well cultivation must ofcourse, in most instances, be less than that caused to the ordinary tillage, and the difference of the extent of the damage in these respective branches of agriculture, it is to be recollected, must operate as a positive benefit to the Well land from the enhancement of the value of its produce, so that a Well will, in many a year of scarcity, be as valuable and profitable a property, as in good seasons, and sometimes perhaps more so.

Mr. Chaplin's 7th paragraph involves a most important question, and requires the most mature deliberation, before a decision be made, which cannot be recalled. It seems to recommend to the adoption of Government the native plan of encouraging improvements in agriculture, by confering a certain portion of free land, and rendering the rest of the improved or irrigated land liable to the ordinary Assessment. The result is, that the revenue weighs as heavy as ever upon the land from which it is drawn, and is subject, to the same extent as ever, to the contingencies of the seasons and other circumstances, while the holders of free land, a body of men whose interests are directly at variance with the revenue in-

terests of Government, receive a considerable accession of strength. The inconveniences arising from this latter source, and the necessity thus produced for protecting the interests of Government have given rise in some parts of the country, to the expedient of laying a tax (Sawadia) on cultivators tilling free land, this tax has, we believe, been abolished by our Government; it is certainly not so consonant to the genius of the British, as to that of a native Government, which delights in having some little petty holds in every quarter, to be improved as occasion may offer, and which derives from such claims advantages, which could scarcely originate under our Government, averse as it is, upon the soundest principles, from interfering with personal liberty, and the management of private property.

The bad effects also with reference to the burthen on the country, and to the stability of the revenue, of rendering a portion only, of the newly irrigated land liable to pay revenue may be easily shewn.

Let us suppose, that the utmost revenue which a certain district can pay, is Rupees 200,000, let us suppose that it pays only Rupees 100,000, but that the sum is derived from one half of the districts, the other half being free: it is obvious, that the most trifling casualty is sufficient to cause a diminution in the revenue, nor so long as private interest and management will get the advantage over official vigilance, will the Government half be in so high a state of cultivation as that belonging to individuals? but if the Rupees 100,000 were paid by the whole district, the case is very different; the land is assessed to only half the extent which it could pay; it must therefore be no slight casualty, but a very serious calamity, that could affect the revenue: there is also no private interest enlisted against the Government, since each portion equally pays revenue, and affords a profit to the cultivator.

The observation of Mr. Chaplin, that a portion of rent-free land is tangible property, while the abatement of revenue is one that cannot so easily be estimated, is certainly most just; but it will not be possessed of the same force, when Government shall limit its demand upon the Well land concerned, which it must certainly do for a long term of years at least, in pledging itself, that the Assessment should be two thirds, or any specified portion of the present Assessment, or the engagement itself would be a mere mockery. The same process, which enables a person to ascertain the value of the produce of the third part of a field, will enable him to ascertain the value of the produce of the whole field, and, if the demand of Government is known, he will be at no loss to discover the amount of surplus, and according to the value of that surplus, the whole field will be capable of being sold and mortgaged, as in Canara and Malabar. But land watered by Wells, is in fact, even under present circumstances, sold and mortgaged in other parts of the country.

Upon the subject of the 8th paragraph of Mr. Chaplin's letter which states the improbability of Government deriving any advantage from the plan proposed, founded, we presume, upon the supposition, that speculators would not offer themselves upon the conditions specified, we beg leave to refer to the 2nd paragraph of this letter. We must not here omit to say, that a very considerable share of the advantage to Government which the proposed plan will, it is hoped, produce, if agricultural improvements should in consequence be undertaken, consists, not in increase of revenue, but in spreading the revenue moderately increased over double the quantity of irrigated land.

If the allusion which Mr. Chaplin makes to the plan, in the 9th paragraph of his letter, is found to contemplate the preservation of the principle of lowering the Assessment on Well land, generally by bringing the old Wells upon the reduced Assessment, so as however not to entail a sacrifice on Government of any revenue actually levied, the whole value which the plan has ever been thought to possess will be gained; if this be abandoned, one of two results will be likely to follow, if great encouragement for sinking new Wells be afforded, by subjecting them to a light Assessment only, while the old ones are heavily assessed, the old ones will be liable to be abandoned, as was experienced by Mr. Thackeray; if, on the other hand, the new Wells, after the term of a Cowle, are subjected to the present Assessment, while a portion of land is rendered rent free, the very great advantage of lightening the Assessment, by spreading it with a moderate increase over a much larger space, will fail to be attained, and the inducements to Ryuts to cultivate and improve land, in which comparatively the Government has a trifling interest, will be considerably extended.

To some of the principal considerations which occur upon the subject, the encouragement contemplated to be given to Well cultivation, must of course be created by a sacrifice on the part of Government, not of actual revenue, but of a share of future revenue, which would not be produced without that encouragement: the sacrifice under the plans received, may be temporary or permanent, or partly both, and it may be the last in different ways; if it is temporary only, by means of a long Cowle of exemption, it may be doubted whether private interest is sufficiently engaged in the permanent improvement of the cultivation, if it is permanent only, such permanent sacrifice, in order to overcome the distrust of the natives, must be considerable, and, if it is confined to the new Wells, will operate badly in reference to the old Wells: if free land is created, further inconveniences will be occasioned; if it is partly temporary and partly permanent, the permanent sacrifice being confined to the new Wells, such mixed agreement will enable the interests, both of Government and individuals, to be consulted, but the same remark applies in its degree to this, as to the last mentioned plan; if it is partly temporary and partly permanent, such perma-

nent sacrifice being upon the principle submitted on the 18th ultimo to Government, it possesses the advantage of the 3rd plan, and is free from the objection to which that plan is liable.

It may be asked, where is the necessity, that the Assessment on irrigated land should be lowered, while that on the ordinary cultivation, which is comparatively so much heavier, is left unaltered? To this we would answer, that this abatement is, we think, a very important, if not an essential instrument to effect the measure in contemplation, and if is no small recommendation, in our opinion, of any project for permanently and effectually encouraging Well cultivation, and especially by reducing the Assessment which it pays, that it furnishes means of rendering Assessment in general more light, without materially affecting the resources of the state. By lowering the Assessment on Well land, it stimulates and enables many individuals to rescue their land from the high and discretionary Assessment laid on the ordinary cultivation: thus the revenue derived from this source is rendered less in positive amount, and its proportion to the revenue generally is in a still greater degree diminished, while the resources of the Government are at the same time increased: under such circumstances, it might not be so impracticable as it is now, to make an effectual reduction in the Assessment on the ordinary cultivation, since the sacrifice which it would entail would be less, and the means of Government to meet it, would be greater than at present.

Mr. Williamson, the Acting Collector at Kaira, replied to the circular, on the 13th of April 1825, as follows.

I am of opinion, that the proposed plan would answer in "Senja" villages, and under some circumstances might be productive of advantage; but I would by no means recommend its introduction as a fixed rule, to be substituted in room of those now existing, but only brought into practice at the discretion of the Collector, when local circumstances rendered it preferable.

In "Nirva" villages however, the plan, I conceive, would be attended with effects inconsistent with the tenure by which the "Baugs" or shares in these villages are held: each "Baugdar" has the management of his own share, building Wells, and otherwise improving it without the intervention, or, enterference of Government. Let the "Baugdar" carry his improvements ever so far, he only pays the allotted portion of revenue due from his share, by the original division (Lamboorva) of the village, hence his Assessment only rises when that on the whole village is increased, individual exertion is thus rewarded, and idleness taxed. "Nirva" villages, it is observeable, are always the best cultivated, and when general, over-Assessment does not prevail, they generally prosper. With this principle of management, the proposed plan would interfere, and I therefore think, should not be introduced.

To encourage the construction of Wells, I have usually adopted a few simple rules sanctioned by local custom: They are, in substance, as follows. When a cultivator expresses a wish to sink a Well, a "Gunwut" or "Putta" is given him of the and to be irrigated from it, specifying, that he is to enjoy the "Rubbee" crop, so many years free of Assessment.

The period of exemption ofcourse depends on the expense to be incurred, or the difficulties to be overcome: when water is found so deep as 45 haths, and upwards, from the surface, or is likely to turn out brackish, a good deal of expense, and risk is incurred, and a long exemption is given. In places where water springs at 15 or 25 haths, four or five years exemption are generally sufficient.

In the "Gunwuts" I have of late issued, I have added a clause to the old form. It explains the reason why the period of exemption is long, or otherwise, and is necessary, in order that terms given in one place may not be held out as precedents for others, where the natural peculiarities may differ.

As the exemption extends to the "Rubbee" crops, and not, except in rare instances, to the "Kurreef" no revenue is sacrificed, and the usual Assessment afterwards levied, is a clear profit to Government. The expense, in short, is defrayed from land which (except in the monsoon) has been hitherto entirely unproductive.

These rules are well understood by the people, and appear to be much the best adapted for the encouragement of irrigation of any of which I have experienced. As a proof of their practical utility, I need only state, that in the course of three months, I issued in one Purgunnah fifty three "Gunwuts" providing for the construction of that number of new Wells, the expense of which may be estimated at about Rupees thirty thousand. This sum will be almost entirely defrayed by the Patells, and cultivators, but will in a few years bring a considerable increase of revenue and greatly improve the district.

A copy of the foregoing letter from the Acting Collector of Kaira, was sent to the Committee for Revising the Regulations, on the 25th of April 1825, and on the 11th of May 1825, the Committee addressed Government on the subject, as follows.

As the principal object of Mr. Norris' plan was to effect a gradual reduction of the Assessment, it follows, that, where the Assessment is not at present too high, the introduction of the plan is not required, and the fact mentioned by Mr. Williamson, in the last paragraph of his letter, affords strong evidence, that in the district to which he alludes, Well cultivation is sufficiently profitable to the proprietor, though, before this conclusion can be considered as established, it would be requisite to know the number of years'

purchase at which land watered by Wells usually sells in that part of the country.

The only objection, which we have to the plan, of reimbursing the person who sinks a Well, by granting him a Cowle of exemption for a period of years, at the end of which the land is rendered fully assessable, is, that, unless the Assessment is on such a footing as to afford a sufficient profit to the proprietor, the stimulus to continue cultivation and improvement, is removed at the conclusion of the period of the Cowle: under a Cowle of exemption for a sufficient period, it might be consistent with the interest of a speculator to sink a Well on land, which might not be able to pay the usual Assessment, and which therefore, at the conclusion of the period of the Cowle would probably cease to be irrigated. The speculator having been reimbursed for his expenses, would be indifferent to this result, but it would not be by any means such as Government would desire. But, if the speculators' reimbursement were made to consist partly of the permanent advantage derived from the Well, the very construction of the Well would prove, that there was little probability, that it would ever afterwards be disused. We do not mean to apply this remark to the cases mentioned in Mr. Williamson's letter, because there is reason, we think, to believe, that the Assessment is in those instances sufficiently favourable to afford a security for the continued irrigation of the land, after it has become fully assessable. We would merely observe, that this security is not produced by the Cowle of exemption alone.

The rule adopted by the Acting Collector, appears to us to be both the simplest and the best that could be devised for extending Well cultivation in districts were the Assessment on irrigated land is sufficiently moderate. Where reduction of the Assessment is required, they would not be equally operative and beneficial, and it is chiefly upon this supposed emergency, we imagine, that he expresses his opinion in the 2nd paragraph of his letter, that the adoption of the plan submitted to his consideration would be attended with advantage, an opinion in which we entirely coincide.

Mr. A Crawford, Collector of Ahmedabad, replied to the circular, on the 28th of March 1825, as follows:

I have carefully perused the plan submitted by Mr. Norris, and think it might be judiciously introduced, slightly modified, into the Duskrohee, and Dholka Purgunnahs, where the inhabitants are more wealthy, and the ground better suited for artificial irrigation than the other parts of the Collectorate, but the cultivators in the Veerumgam and Purantege Purgunnahs are in general too poor to admit of their taking advantage of, or deriving much benefit from the proposed regulation, without first involving themselves deeply in the books of Sowkars, and this frequently proves to be an endless source of trouble and annoyance to them during their lives.

There are comparatively few Pucka built Wells in the Veerumgam Purgunnah, which is in a great measure, owing to the little encouragement held out by the late Government, to the promotion of artificial irrigation, and to the facility with which cultivators not possessed of much capital, are enabled, throughout the northern part of the Purgunnah, to obtain a sufficient supply of water for the season, by digging holes to the depth of from 15 to 30 feet.

In the Purantege Purgunnah, it is necessary to dig to a great depth before a supply of a water can be had. The inhabitants, in general, are poor, but peaceable, and well inclined to cultivation; the soil however is in most places light, and better suited to the cultivation of the early crops, such as Kadjeree, Mutt and Jowaree, which are brought to maturity by the rains, than for other kinds of grain which require artificial irrigation. Towards Morassa, the soil is of a richer quality, and Well cultivation is more extensive.

In the Southern part of the Veerumgam Purgunnah, and on the borders of the lesser runn, there are but few Wells, the water during the hot months becoming so brackish, that it cannot be applied to any useful purpose.

The same remark applies to the Northern and Western parts of the Dundooka Purgunnah. Indeed, the country between Kote and Dundooka, at the present moment, is almost uninhabited, in consequence of the impossibility of procuring either good water, or forage of any description for the cattle.

Cotton, wheat, (chesea) and gram, which do not require irrigation, being the principal produce of this Purgunnah (Dundooka) Well cultivation is little attended to, but as the whole of the villages in this and the Goga Purgunnah, with very few exceptions, belong either to Ghametees or Talookdars, no regulation affecting their internal management can be introduced.

Mr. Norris' plan seems more calculated for those already in good and opulent circumstances, and who could consequently well afford to incur the expense of sinking Wells, without putting themselves to much inconvenience, than for those in reduced and indifferent circumstances, for a man must already possess a Well, or he must wait until there are subsidiary Wells to the whole of the old Wells of his village, before he can benefit by the proposed regulation.

In the Dholka and Duskrohee Purgunnahs, it has been usual to grant Gunwuts, or leases for four, five, and six years, according to the depth necessary to be dug, to persons wishing to sink new Wells, exempting the ground irrigated from the new Wells, during that period, from any additional assessment beyond what it paid prior to the sinking of the Well. Twenty Beegas is the usual quantity of ground assigned to a person sinking a Well. It frequently happens that the spring is not sufficiently powerful to enable him to irrigate the whole of the ground, or that his means do not admit of his keeping up a sufficient establishment of Bullocks. What

cannot be watered from the Well is sown with early grain, such as Badjeree and Jowaree, and Government do not sustain even a temporary loss of revenue.

I am unwilling at present to offer any decided opinion, but I am inclined to think, from the observations and enquiries I have been able to make, that the rates of Assessment, of many of the villages in the Dholka and Duskrohee Purgunnahs, are much too high, and are probably more than the cultivators could afford to pay, did they not hold other ground, such as Vichania, Gerania, Wanta, and Sulamea, lightly assessed. The introduction of a regulation, such as is proposed by Mr. Norris, reducing the rate of Assessment on the old Well, on the completion of a new one, would tend, no doubt, to the prosperity of the country, but I think that the full Assessment on the ground watered from the latter, should not be required for at least the first year after the completion of the Well.

Mr. Norris does not provide for the sinking of Wells by those not already in the possession of old ones, until there are subsidiary Wells to all the principal ones at the village. This seems to bear hard upon many poor Ryots, who could probably borrow a sufficient sum to enable them to sink one Well, but not two.

With the view of encouraging the sinking of Wells by persons so situated, I should beg to suggest, that leases be granted agreeably to the accompanying Table, exempting the ground irrigated from the new Wells, from any additional Assessment, during the period of the lease, beyond what it paid previous to the sinking of the Well. At the expiration of the lease, should subsidiary Wells to all the old Wells of the village have been completed, the Assessment on the ground irrigated from the new Well, might be fixed at the reduced rate, but not otherwise.

Table specifying the terms on which it is proposed, that leases be granted, to encourage the sinking of Wells.

Depth of the Well.	Diameter of the Well.	Number of Beegas allotted to the Well.	Full Assessment when leviable after the completion of the Well.
Feet.	Feet.	Beegas.	Years.
20	12	20	2
30			3
40			4
50			5
60			6
70			7
80			8

N. B. Until the expiration of the lease, the ground attached to the Well, will be assessed at the Akasee rate of the village. When

the lease shall have expired, the Baghayet or Koostur rate of Assessment will only be levied on such portion of the 20 Beegas as shall have been irrigated during the season. The remainder of the ground will be assessed at the Akasee, or dry rate, whether it be cultivated or not.

Mr. Lumsden, the Collector of Surat, replied to the circular on the 12th of May 1825, as follows.

It appears to me, that Mr. Norris' plan in its probable operation would excite much dissatisfaction among the Ryuts in these districts: supposing for example, three or four Ryuts should sink Wells and bring new land into cultivation, and obtain a reduction of one third on the Beegoty, not only of the new, but of the old land, then the other cultivators of Sugar Cane lands in the village would claim a like reduction, upon the Beegoty of their Sugar Cane lands, and nothing would satisfy them, that they had not a kind of right to it. They would immediately consider their Beegoty very high, and judging by comparison it would be so, and I should be afraid that they could not be made to understand that their neighbours had any claim to such a reduction on the Beegoty of the old lands, which did not apply equally to the whole of the occupiers of Sugar Cane lands in the village. It must be acknowledged also, that they might plausibly urge, that they were perfectly ready and willing to establish a claim to a reduction of the Beegoty, but that there was no more new land fit for Sugar Cane to enable them to fulfil the condition of the claim, and that physical causes alone, and no fault of their own, excluded them from a participation in the liberality of Government.

This great boon could, according to the condition attached to it, only reach a few fortunate individuals, and would, in my opinion, excite in the breasts of the majority of the cultivators of Sugar Cane, envy and enmity against the favoured individuals, restlessness and apathy in their labours, and clamour and lasting dissatisfaction towards Government.

No partial, and at the same time great reductions, are advisable in this Zillah, where each of the Ryuts stands separately to his own profit and loss, where the lands are comparatively valuable, the population dense, and a large proportion of the Ryuts are of the Brahmun caste (Battelas Unawul Brahmun) and prone to intrigue and clamour.

I see no objections however, to trying the experiment in one or two villages even here, and it is very likely that it may be found calculated to answer the ends contemplated in many parts of our

territories where circumstances may differ from the above, in respect to soil, tenures, and character and condition of the cultivating classes.

Mr. R. Boyd, Collector of Broach, replied to the circular on the 20th August 1825, as follows.

I look upon Mr. Norris's proposition as possessing much merit, but I apprehend it is better calculated for a limited estate than for a Collectorate, because I hold the superintendence of it to require so much personal activity and intercourse with the Ryuts, as to render it nearly impracticable under a limited European agency in a large country.

Another objection presents itself at the same time, to its introduction, in the unwillingness of Natives to await the tardy results of any complicated scheme, as well as in the necessity of treasury advances, to enable a commencement of a work, so desirable in itself, but which probably could not otherwise be accomplished.

Having thus far endeavoured to state why I consider the general adoption of the plan objectionable, it rests for me to express my unqualified appreciation of the benevolent views which no doubt led Mr. Norris, to turn his mind to a consideration of a subject, connected with the improvement of this country: and to declare my belief, that in the Zillahs which lay north of the river Myhee, something might perhaps be done in maturing the plan proposed by that Gentleman.

I found my belief, on what I have observed regarding the soil and habits of the people in the range of country above adverted to; where I have indeed always been led to understand, that artificial irrigation is much practised, and carried on in a scale of extent unusual in other parts of this Province.

I conceive the Ryotwar system, wherever it exists, to favor the adoption by degrees of Mr. Norris's plan, but I look upon the system generally in practise here, as adverse to that measure.

Artificial irrigation is established in some of the villages in this Collectorate, in most of them however, I do not think it could be introduced, owing to the nature of the soil, perhaps the Jumbooseer Purgunnah, more than any other, is open to the improvement, yet the treasury payments are impediments in my opinion, which must operate any where.

Supposing an increase of capital in the country, large outlays made in sinking Wells, and much industry bestowed on cultivation, it would lead perhaps, to the abandonment of lands where Wells would be of no service, and I doubt, whether the increased revenue from the wet lands would compensate for the loss of whole divisions which might remain waste, in less favored positions, for instance, the maritime, of the Collectorate.

Mr. J. B. Simson, Collector of the Northern Concan, in a letter dated the 30th of March 1826, submits the following observations, in reference to the plan suggested in the foregoing letter from Mr. Norris, dated the 18th of February 1825.

The plan submitted appears to me an indirect mode of obtaining what might be acquired in a direct, and therefore in a preferable manner. If Bhagyut lands are taxed so high as to prevent any anxiety to procure them, it appears to me, that the best remedy is, at once to reduce the Assessment till that object has been obtained; as soon as such has been effected, this description of cultivation will keep pace with the extent of demand, capabilities of the country, and the means of the Ryuts, and the only aid after this which I should consider, Government could beneficially grant, would be judicious advances of Tuggari. If the rates are only equitable, or light, I see no reason why they should be still further reduced, and we may be sure, the gardens will be added to, if the above inducements present themselves: if the latter do not exist, the additions will only cause the original gardens to be less productive to their owners, and consequently endanger the punctual realization of the public revenue derived from them.

The following is an extract from a Report by Captain Cruikshank, the Revenue Surveyor of Guzerat, on the Duskroee Purgunna, in the Ahmedabad Collectorate, dated the 31st of December 1825.

As an example of the expense attending, and the process pursued in the construction of Wells, as well as the method of deepening them, when the supply of water proves at first scanty, an account of one of the largest (though not most common) description, working 2 koss, sunk first to 40 haths, and afterwards increased in depth to 50, is given below, as tending to bring all these particulars, at once to view. An excavation being made to the depth of 30 haths, and water appearing, a Chukur, formed of the Sumra, Keejura, or Raen Tree wood, and made to fit easily the circumference of the hole, is slipped to the bottom, on this the brick work is built up, while an excavation goes on at the same instant underneath, by which means the entire structure (in this state termed a Toondee) is sunk to the distance, if possible, of 10 additional haths, the water being drawn off, during the proceeding, by several koss, worked by Bullocks in the usual manner. The bricks are placed together, without any other cement than a little clay, throughout that portion of the Well which is intended to be under water, but must be shaped and fitted with great nicety. On the sinking having been effected to the greatest possible depth, the brick work is carried up to the surface, cemented with chunam, and the Well in this state is finished in every respect. But should the supply of water be found deficient, as is generally the

case in large Wells, a second Toondee, made to fit within the first, is introduced, built upon and sunk, in a precisely similar manner, and this operation is of a very expensive nature, from the labour requisite in drawing off the mud and water with sufficient dispatch. It is occasionally necessary to insert, even a third Toondee to the additional depth of 6 or 8 baths, but sometimes a strong wooden frame, termed a Kuntwa, is substituted. The expense attendant upon each distinct part of these several operations, is shewn in the Table below. The Well is supposed to be shared by 2 Pateedars, who amongst themselves and relations, can furnish, to assist, 8 men and 8 Bullocks, estimated as the personal labour, in the 1st column.

	Estimate of personal labour.	Cash expended.	Total.
	Rs. Q. R.	Rs. Q. R.	Rs. Q. R.
Excavation by 10 men during 20 days, at 2 annas each per day..	20	5	25 .. ..
Chukur (wood 10, Sootar 5, Pugree 5)....	10	10	20 .. ..
Bricks (50,000 kacha, made at 1¼ Rupee per thousand)....	.. .. ..	62 2 ..	62 2 ..
Wood and other fuel for burning the Bricks....	50	.. .. ..	50 .. ..
Labourers (12 daily for 10 days, at 2 annas each)....	10 .. .	5	15 .. ..
Chunam (2,800 maunds, at 4 Rupees per hundred)..	56	56 .. .	112 .. ..
Bricklayers 4, at ¼ Rupee and food worth 2 annas per day.... ..	.. .. ..	60 . ..	60 .. ..
Further excavation and sinking the Toondee, 10 baths, including hire of Bullocks and Labour..	20	20	40 .. ..
Contingent Labourers (22 daily for 40 days, at 2 annas each.).. ..	40	70	110 .. ..
Instruments, Tools &c..... ..	.. .. ..	10	10 .. ..
Expenses to 40 Baths..	206	298 2 ..	504 2 ..
Chukur for second Toondee (wood 4, Sootar 4.)....	4	4	8 .....
Bricks 7,000, at 2½ Rupees per thousand....	.. .. ..	71 2 ..	17 2 ..
Bricklayers and Labourers.....	5	12 2 ..	17 2 ..
Bullocks hire, night and day, for 10 days, sinking the Toondee &c.	50	10	60 .. ..
Expenses to 50 Baths.... ,	265	342 2 ..	607 2 ..

A Well of this description will, at the outside, irrigate by each koss, 12 Beegas of Rubbee, or after produce, but the highest average on which estimates can be made, are 8 Beegas to a single koss, 14 to two, and 20 to four koss.

17. The following Table is constructed on a similar calculation to the above, to shew the cost, inclusive of personal labour, attending the erection of each of the several descriptions of Well in use, throughout this Purgunna.

	At 20 Haths depth.		At 40 Haths depth.		
	1 koss	2 koss	1 koss	2 koss	4 koss
	Rs.	Rs.	Rs.	Rs.	Rs.
The Kundul kucha kooa built of kund without chunam.....	41	"	120	180	
The Pucka with chunam	66	100	170	225	
The Endul kucha kooa built of brick without chunam....	88½	131	237	355	
The Pucka with chunam....	137	205	337	500	675

The kucha kooa, or single excavation, used on the low Bhata ground, and varying in depth from 8 to 15 haths, costs from 5 to 11 Rupees; if supported by a Kuntwa or stout frame of wood, the cost would be increased to 23 Rupees. The expense increases with the depth of the Well; and as far as 40 haths, the proportions in sixteenths may be 2¼ for the first 10 haths, 3¼ for the second, 4½ for the third, and 6 for the last. If the Well exceeds in depth 40 haths, the additional cost for the insertion of the 2nd Toondee may be ¼ or ⅓ of the whole expense previously incurred. The extra cost of an increased number of koss may be estimated for two, at about half as much more as for one; and for four, double that of one.

18. The preparation of land for irrigation, is attended also with considerable expense, in addition to the cost of the Well where waste, or ground that has previously borne only dry crops, is to be converted into Rice land, it may be estimated at 10 or 12 Rupees per Beega; but where the ground has previously produced Rice without artificial irrigation, the expense will be only 4 Rupees.

19. For working the deep Wells, termed Rameea, 2 pair of Bullocks are employed to each koss; the rope, readily slipped from the pair at the bottom of the inclined walk, is drawn rapidly back by the descent of the koss, or leathern bag, down the Well, and immediately fastened to the pair that stands ready at the top, whereby no time is lost, and the koss is drawn up as rapidly as it can fill. The Soondeea, or shallower Wells, are worked by one pair of Bullocks only, which after drawing up the koss and dis-

charging its contents, retire slowly backward, without slipping the rope. For the Soondeea koss one man only is required; but for the Rameea 3 are necessary, 1 to each pair of Bullocks, and 1 to draw in and empty the bag on its arriving on a level with the surface. Of the Rameea koss (containing from 10 to 12 maund of water) 700 are usually drawn in the course of a day; but the number may, on extraordinary exertion, be increased to 1000, if worked without interruption and with reliefs of men and Bullocks. Of the Soondeea koss (containing 8 or 9 maunds) about 800 may be drawn in the course of the day, but the number in both instances must depend somewhat on the distance of the water from the surface. A single koss of either description will water, in one day, from ½ to ¾ Beega; or from that to 1 Beega with reliefs of Bullocks; and throughout the season the irrigation of 8 or 12 Beegas may be accomplished. For working the Rameea Well, the finest and strongest bullocks are required, but for the Soondeea, small light cattle will answer, and these indeed sustain less injury from the backward pace, than the large heavy Bullocks, to which it is said to be detrimental.

20. The value of Wells is so great in securing the crops (particularly the Rice) when the usual fall of rain proves scanty, that this species of improvement might perhaps be carried to the utmost extent, with little risk of loss. The land will be increased in fertility, and rendered equal to the growth of superior produce; and during the lease for a Well, pays the ordinary dry grain rent as a fixed thing, whether cultivated or not, with an early crop, though in the unimproved state of the land, revenue is derivable from it, according to the prevailing practice of the Purgunnah, only when under actual tillage. The occupation of the Ryut in this species of cultivation will not, as might be supposed, cause the neglect of the dry lands, but the necessity imposed upon him to provide himself with good cattle, for the culture of the irrigated and valuable lands, augments his resources for cultivating those of a poorer description.

21. The chief portion of the Wells that existed on the Purgunnah coming into the possession of the Hon'ble Company, were found to be of old construction, and their increase may be traced principally to the period (about 50 years since) when the cultivation of Rice superseded that of Indigo (a crop not requiring irrigation) owing to an extraordinary and lasting fall in its price. The unsettled state of the country, and the uncertainty attending all rates of taxation under the frequent changes of rulers, and of revenue farmers, who respect so little the engagement of their predecessors, must naturally be expected to have had the effect of banishing improvement of every kind from the Purgunnah; one therefore involving so large an outlay of capital as is required for Wells, could very seldom have been attempted.

22. Under the greater security of rights and property now enjoyed, the Wells have increased in number, and many of those previously in ruin, have been rebuilt: but not only in the Duskroee and Parantej, comprising the portion of the collectorate where irrigation can be applied with the greatest advantage, the want of some general rule and standard for the encouragement of Wells is exceedingly felt. The practice generally prevailing is, to exempt from payment the Rubbee, or after crop, raised through the agency of the Well, for such a period as shall cover the net cash expenditure: and this may vary from 3 to 6 years: but, if the land have been previously under cultivation, the rent for the Kureef, or early crop, is paid as usual, during the whole term, whether such a crop be subsequently raised or not. On waste of old standing, a slight remission for one or two years is made of all rent, whether for the Kureef or Rubbee. But the favorable nature, or the contrary, of the conditions granted, is supposed to depend mainly on the estimate which the Komavisdar may conceive suitable to the occasion, and on the countenance and support afforded by the Tullatee of the village; and these in the eyes of the Ryuts are weighty obstacles. An established rule, holding out the probability of a liberal profit, in addition to the repayment of the espenditure incurred, would enable the poorer classes on the strength of their credit, to engage in the speculation without apprehension; for it is to be remembered, that nearly every man, in venturing on such an undertaking, is obliged to borrow money at a rate of interest depending on the view the lender takes of the risk and the probable profit to be derived from the lease; and it can be confidently stated, that numerous instances occur of individuals so far involved by such works of improvement, as to be unable afterwards, to extricate themselves.

23. The most feasible measure that presents itself, is perhaps, that of establishing a table, which shall regulate, exclusively, the terms on which Gunwuts shall be granted for each class of Well fixed, with reference to the depth of the water, and the number of koss worked: still greater encouragement might be held out for the superior description of Wells, by fixing in perpetuity a lighter Beegotee on the after crops irrigated from them; their original cost is comparatively greater, and so is the expense of working them. If the Government rent on the Rubbee (averaged at 3 Rupees per Beega) on 8 Beegas for a Well of one koss; on 14 for two; and on 20 for three, four, or any greater number of koss; should not be equal within the space of 10 years, to cover the cash expenditure, with compound interest, at 12 per cent, calculated on the annual balance, after bringing to account the proceeds of each successive year's corp; an additional exemption from the Khureef rent (averaged at 4 Rupees) might be granted for such a term as would cover the balance. The personal labour of the parties may be considered as the right of Government, and will be

cheerfully yielded, if the terms be in other respects liberal, they do not therefore enter into the calculation. The Beegotee on the Rubbee ultimately may be fixed at 2 Rupees for Wells of 45 Haths depth and upwards; at 2½ for those of 35 and upwards, and 3 or 3½ for those under 35 Haths.

24. The following exhibits the manner in which an estimate may be formed for such a Well as that described above; to be brick built: 50 Haths in depth, working 2 koss, and equal to water 14 Beegas of Rubbee.

	Rs.	Q.	R.
Net cash expenditure, exclisive of personal labour....	342	2	0
Add compound interest at 12 per cent, on annual balances after the Begotee of each successive year on 14 Beegas, 3 Rs. at each is brought to account....	224	3	0
Total..	567	1	0
Rubbee Beegotee on 14 Beegas, at 3 Rupees, for 10 years....	420	0	0
Kureef ditto ditto 4 ditto 2 years..	112	0	0
	532	0	0
Balance against the Ryut..... ..	35	1	0

This small Balance would be of little signification, were the Rubbee Beegotee (the Well being of 50 Haths) to be permanently fixed at 2 Rupees, which would eventually prove for more than an equivalent; on similar data is calculated the following Table, by which Gunwuts might be at once granted for any description of Well; the Eental are those built of burnt bricks; and the Kund, those of half burnt clay, in long pieces, a little curved, to fit the circular shape of the Well.

Wells.	Description.		Expense.				Rent exempted.			
	Depth of well,	No of koss.	Net cash expended.		Interest at 12 per cent.		Total.		*Kureef at 4 Rs. per Beegah.	Rubbee at 3 Rs. per Beegah.	Total rent exempted.	
	Haths		Rs.	Q. R.	Rs.	Q. R.	Rs.	Q. R.	years.	years.	Rs.	Q. R.
Kund mud plastered.	20	1	25	.. ..	3	2 ..	28	2 ..	..	2	48	.. ..
Kund chunam built.	20	1	35	.. ..	6	.. ..	41	.. ..	..	3	72	.. ..
Kund, mud built.	30	1	44	.. ..	8	1 ..	52	1 ..	..	3	72	.. ..
Kund, chunam built.	30	1	62	.. ..	16	.. ..	88	.. ..	..	4	96	.. ..
Kund, mud built.	40	2	112	.. ..	31	3 ..	144	3 ..	..	5	210	.. ..
Kund, chunam built.	40	2	143	.. ..	51	2 ..	194	2 ..	..	6	252	.. ..
Eental, mud built.	20	1	52	2 ..	12	2 ..	65	.. ..	..	3	72	.. ..
Eental, chunam built.	20	1	72	2 ..	23	2 ..	94	.. ..	..	5	120	.. ..
Eental, mud built.	30	1	91	.. ..	33	2 ..	124	2 ..	..	6	144	.. ..
Eental, chunam built.	30	2	210	.. ..	129	.. ..	339	.. ..	..	8	336	.. ..
Eental, mud built.	40	2	215	.. ..	138	.. ..	353	.. ..	..	8	336	.. ..
Eental, chunam built.	40	2	300	.. ..	217	2 ..	517	2 ..	1	10	476	.. ..
Eental, chunam built.	40	4	405	.. ..	258	.. ..	663	.. ..	1	10	680	.. ..
Eental, chunam built.	50	2	342	2 ..	224	3 ..	567	1 ..	2	10	532	.. ..
Eental, chunam built.	50	4	465	.. ..	266	.. ..	731	.. ..	2	10	760	.. ..

If the Gunwuts for Wells of the classes marked a, should be required for the purpose of working two, instead of one koss, the same number of years exemption from the Rubbee Beegotee will answer. The expenses would be fifty per cent greater, and the profit from the larger quantity of land cultivated, in about the same proportion.

25. The people are, in general, found to be unwilling to commence a Well, unless the terms to be granted are previously

known and guaranteed to them, and as the above Table, or one of the like nature, could not be acted upon, unless the depth at which sufficient water will be found, were previously known, the following is subjoined, as a pretty correct standard, by which this part of the calculation may be universally made, even before any part of the work be begun.

If the villages east of the Suburmuttee be divided into two parts by a line drawn from Nurora and Koturpoor through Rukheeal and Butwa, to Chosur, the depth of water will be found to vary from 30 to 40 Haths in the Southern portion, and from 40 to 52 Haths in the Northern.

If the villages west of the Suburmuttee be divided into three parts, by a line drawn from Oowarsud through Udaly, to Raneep and Kochrub, and a second line drawn from Kochrub through Surkhey, to Sunathul, the depth of water in those east of the first line will be found to vary from 40 to 52 Haths, in those west of it from 35 to 45 Haths, and in those south of the second line from 20 to 35 Haths, The depth of water on Bhata land, generally varies fr 8 to 20 Haths.

26. Although the land, on which the Well is to be erected, is intended for the growth of superior produce, and its introduction should actually take place during the terms of the lease; still the Khureef rent on the original dry crop only, should in justice be taken: for the expense of preparing the land is more than equal to the probable profit to be derived during the period, from newly formed Rice ground; and the slow growth of sugar cane plantations, or other productions of the Maleeat class, consumes any superior return they may make during the first seasons of culture. In granting Gunwuts, the Mookhee Patel should, perhaps, be looked upon as answerable, that no material deviation from the agreement be made on the part of the Ryut; but the interference of Tulatees, or inferior native servants of the Kucheree should be carefully avoided.

27. For the encouragement of Wells of the best description, a portion of the produce raised from such, might be granted to the builders and their descendants, in perpetuity, whereby the industrious and wealthy would be enabled to leave to posterity, lasting and most beneficial memorials of their respectability. If the cost of the Well be more than 800 Rupees, for instance, one fourth of the Government share might be allowed; if more than 1200, one third; and if more than 1500, one half; such an arrangement too, would tend to keep the land perpetually in cultivation, but the repairs of the Well should devolve upon Government, whose property it becomes.

28. In concluding this part of the subject, it may not be improper to notice the very great advantages that would arise from encouraging, Koolees in particular, to employ themselves in works of this nature; the terms granted to them might be made

more favorable than those for the Koombees, and a gratuitous advance of cash to cover one eighth, perhaps of the expense, might under proper restrictions be made them ; or a still better plan might be, to allow one fourth of the cost of the Well to be defrayed by Government, and the term of Gunwut to be diminished, a third, or a half of the number of years granted to Koombees, as in case of the Koolee swerving from his engagements, or not doing justice to the land, it would at an earlier period be relieved from his occupancy ; such encouragement would tend to work a gradual change in the habits of this large body of the population, whose disposition to practicability and industry, requires only to be properly met, to render them useful subjects of the State.

On the 17th of June 1826, a circular was addressed to the several Collectors in Guzerat, the Deccan, and the Concan, forwarding to them copies of the foregoing extract, and calling for their opinions on the suggestions of Captain Cruickshank, regarding the construction of Wells, as adapted to their districts respectively.

On the 14th of July 1826, Mr. Bax, the Collector of Candeish, replied to the circular of 17th June, in the following terms.

The four first paragraphs described the plan, and expense of constructing, and the mode of working the Wells, and in these respects they appear perfectly suitable to this Province. The three subsequent paragraphs, as they relate to facts and arguments of a local nature, require no observation from hence, and I shall therefore proceed to offer a few remarks, to be submitted to the Hon'ble the Governor in Council, on the suggestions of the Surveyor, contained in the 23rd and subsequent paragraphs of his report, for encouraging the construction of the proposed Wells.

The plan recommended for this purpose, consists in establishing a Table (of which a form and scale of rates is furnished) to regulate the terms on which Gunwuts should be granted for each class of Well proportionate to the depth and the number of Motes worked. In fixing, for a superior description of Wells, a lighter Begotee in perpetuity, on the after crops irrigated from them, and for the encouragement of Wells of the best description, it is proposed, that a portion of the produce raised by them, be granted for ever to the builders and their descendants.

The general system hitherto prevailing in this province, has been to remit gradually such an amount of rent only as will cover the original cost of the Well, which becomes the property of the Government, without reference to the circumstance under which the money for its cost may have been borrowed, or to the interest of it.

The encouragement has consequently been small, and very few new Wells of any size have been made. The districts however abounds with ancient Bowries and Wells of excellent construction, which, individuals are occasionally induced to repair, and it is, I think, preferable to encourage this practice, rather than to commence upon new Wells. The mode of remuneration to the individual in such cases (and they are not numerous) is settled upon a consideration of the circumstances of the case itself as it occurs.

Although the plan for the encouragement of the construction of Wells, is no doubt, well adapted to the populous and flourishing Purgunnahs of Guzerat, and would be so in Candeish in its more advanced state, I should not however anticipate any practical result from introducing it here at present. Its promulgation would, I apprehend, prove a mere nullity in this province, where the inhabitants, comparatively few and poor, have not arrived at that point which enables them to undertake works of improvement on a joint and concurrent interest, and individuals are not able as yet to do so. The principal want here in fact, is population, which time alone can supply. Grain and all the articles of life are already so cheap that the Ryut experiences greater difficulty in disposing of his produce than in raising it.

Mr. Farquharson, the 1st Assistant in charge of the Broach Collectorate, replied to the circular of the 17th of June 1826, on the 10th of July, in the following terms.

The Wells suggested by Captain Cruickshank, are not in any way adapted to this district, in the first place, from the nature of the soil here, their construction would be the means of incurring a very heavy expense, and in the second, each field does not, (as in the Northern Zillah) require a Well for itself.

On these grounds, I am disposed to think, that Captain Cruickshank must allude to Ahmedabad and Kaira, and not in any way to this Collectorate, when he states that great advantages would be derivable from the erection of such Wells, as the soil of those districts, being of a sandy nature, and water not very deep in the earth, not only facilitates the sinking of a Well, and allows of its being done very cheaply, but also makes it necessary that each separate field have a Well in it.

Mr. Williamson, Acting Collector of Kaira, replied to the circular of the 17th of June 1826, on the 31st of July, in the following terms.

The general outline of the plan recommended by Captain Cruickshank, is in many essential respects, the same as that already in

force in this Zilla. He supposes at the same time considerable changes, and after weighing his arguments in their favour, against their probable effects in practice, I am of opinion, they should not be acted upon, in preference to present rules.

The plan proposed, is explained in the 23rd paragraph. It is to establish a Table, to regulate the terms on which Gunwut leases of Wells shall be granted, fixing them with reference to the "depth of the water" and the number of *koss* (leathern bags for drawing water) worked.

Standards of this kind are found not to answer. The depth of the water is a material point. But there are other contingencies almost as important, to be taken into account, in settling the conditions of a Gunwut. The first thing thought of, is the nature of the land. In a sandy soil the water may spring at the same depth, from the surface, as in a former mould, the Ryut would often not accept double the term of exemption in the former case, as he would in the latter; the liability of the Well to fall in, when excavated in a light soil, involves great risk, some times causing heavy loss of labour, and money; the productiveness of the soil varying in marked degrees, even in adjoining fields, is another consideration; the quality of the water is another. In calculating his remuneration, the cultivator looks to these natural peculiarities, too multifarious *in Gazerat* to be regulated by a set of fixed rules, like those in this extract.

It is suggested in the 27th paragraph, that the repair of the best kind of Wells should be made by Government. This I also think, would be inexpedient. It is often very necessary to assist Ryuts in repairing their Wells, by remitting for a time a small sum in their "Khotas" (gross fixed payment). Like a common abatement of revenue it is allowed as a boon in cases of urgency. But Government could never, with benefit, undertake the general repair of any class of Wells. It would be a task unprofitable, and endless; one that would lead to extensive dealings and expenditure, that could never be effectually superintended, to a neglect of the Wells, and to the Collector taking a charge from the Patells and Cultivators, which they are obviously the fittest persons to conduct.

In replying to a reference on the 13th April 1825 from Government, dated the 28th February, transmitting a letter from Mr. Norris, I had the honor to communicate some observations on the plan I have found most successful for encouraging irrigation by means of Wells. It simply consists in fixing the terms of the Gunwuts at the time it is required, according to the facilities, or obstacles under which the Well is to be sunk. These, as I have already stated, appear in many shapes and degrees, to accommodate which, from three to ten years of exemption, from revenue, are granted on the after-crop according to circumstances. The expense and labour being estimated, the conditions granted should

be liberal. The term of exemption somewhat longer, that a strict calculation of returns would allow. To being perfectly understood, and agreeable to local custom, this method combines simplicitly, and the advantage of aptitude to mould itself to the variety it has to satisfy. It is found to answer in practice, as experience attests.

It is not however the only plan practised. Government has sanctioned the grant of small portions of free land for twenty-five years, to cultivators who will undertake the construction of new Wells. Under date the 3rd November last, the Hon'ble the Governor in Council also authorized remissions in the revenue, to assist villagers in repairing their Wells and Tanks, on which subject I made a few remarks in my annual report dated the 29th September last.

These measures, in every respect liberal, are all now in operation in this District, and promise to be attended with much benefit. It does not do to have too many regulations for the same purpose in use at once. If others are introduced, let it be after the present have had a fair trial. A grant in Enam of a larger proportion of land irrigated, or of the produce raised from Wells, might be resorted to at some future period of time, but under existing circumstances, I would respectfully recommend no change whatever.

The following are extracts from the Report of the Acting Collector of Kaira, dated the 29th of September 1825, to which reference is made in the foregoing letter from that Officer.

84. Nothing however operates against improvements of this kind (the construction of Wells) so effectually as converting them too soon into objects of taxation. Even the manifestation of a hasty wish to do so, is discouraging.

108. The repair of village Wells appears an object of increasing importance. Under native Governments the Patells and the people themselves looked after them. It was the practice of Government not to interfere with the internal affairs (of which this is one) of the villages, every department of which was conducted by the Patells. Whether they defrauded Government, or Government oppressed them, it was their constant policy to exclude all agency but their own.

109. Our system however, has effected a change. We have minute information of the resources of the lands, and participate in their management. The Patells have now no objects, or motives for concealment; neither as a necessary consequence, have they that range, that impression of responsibility, that formerly made them look to themselves alone, for the preservation of their villages; and they appeal with some reason for assistance to that authority that has superseded them.

110. The effects of this change of system have been very gradual, and perhaps are in no respect so perceptible as in the state of the Wells, particularly in the public ones. A doubt indeed seems to exist, as to whose business these repairs belong. The Patells say, all the resources are in the hands of Government, and that they possess none to expend. We again say, the Wells are theirs, refer to former usage, and which to maintain their responsibility.

111. The question however in reality does not, I believe, admit of much doubt, tho' perhaps it is not well defined. The responsibility, I humbly conceive, still rests with the villagers: but that at the same time, they should have our assistance, and support.

112. Pecuniary aid has indeed been occasionally granted; for instance in settling a village, a deduction has been allowed to repair the Wells, deepen the Tanks &ca. and when given, it has done much permanent good. Much however remains to be done, and the subject is one to which great attention appears necessary.

114. This plan has many things to recommend it. It tends to maintain the responsibility of the villages, and the assistance coming, as it were in the shape of a donation, is received with satisfaction. In Baugdaree villages, it is the only measure that could with propriety be adopted.

115. It also particularly applies to public Wells, or those from which the people of the village take their supply of water, the expense of the repair of which is often beyond their own means.

116. In Senja, as well as in Nirwa villages, it is the part of the cultivators to look after, and repair the Wells, but in the former, our immediate assistance, while it is agreeable to custom, is also more necessary. A small remission in the cultivators "Khatas" for a limited time varying in amount according to the expense of the required repairs, is in these cases the best expedient I know of. I have often seen Wells, falling into ruins, thereby saved, and the assessment on them preserved.

117. The advantage of a sum expended by Government in this way, is not confined to the extent of the outlay itself. A great deal is done in addition by the people, who subscribe to the repair, sometimes by money, and usually with labour, and materials. The great advantage however, of the remission is, that by effecting a commencement of the work, it insures a continuance of it, and the Sircar's allowance ought just to be sufficient to secure that important object.

On the 1st of July 1826, a letter was addressed by Mr. Newnham, the Secretary in attendance with the Governor, to Mr. Dunlop, Collector of Ahmednuggur, transmitting to him copies of the letter from the Commissioner in the Deccan, dated the 16th May 1823, and 17th March 1825, and of the letter from Mr. Norris, Member of the Regulation Committee, dated the 18th of February 1825, and an extract from the letter from Mr. Simpson, Collector of the Northern Concan, dated the 30th of March 1826, Mr. Dunlop was at the same time called on to furnish Government with his opinion on the subject of those papers.

On the 11th of September 1826, Mr. Dunlop replied as follows,

I cannot find any previous reference on this subject, except a proposition from Captain Cruickshank, respecting the construction of Wells in the Ahmedabad Collectorship, which is altogether inapplicable to this country. ' The obstacles to sinking Wells there, arise from the loose sandy soil, which is liable to fall in, and the process detailed, is intended exclusively, to guard against this, and support the sides afterwards; and it is most admirably adapted to the purpose: but in this country the difficulties arise from an opposite cause, for (with few exceptions) Wells must be cut thro' several strata of rock, of variable depth, and hardness; but in a great majority of cases requiring to be blasted.

3rd. These local differences have advantages and disadvantages peculiar to themselves ; in Guzerat the expense of mere excavation is trifling, and the Kutwa, or foundation of the brickwork is not provided, until water is found; and its quality ascertained, so that little risk is incurred : indeed from the porous nature of the soil, water is generally found about the same level, thó surprisingly different in quality ; but in the country, the principal expense is incurred in sinking Wells, and the hardness of the rock, and clay, or some other cause, sems to prevent water from spreading generally at the same level as in Guzerat ; so that Wells are frequently abandoned, after the undertaker has expended all the funds he could command, without a supply of water being found, by which of course any poor man must be irretrievably ruined.

4th. I have seen two Wells sunk, to between 50 and 60 Haths, almost entirely thro' hard rock, by the tedious and expensive process of blasting, without a sufficient supply of water being found for one pair of bullocks, while other Wells in the neighbourning fields have an ample supply for two pairs at 20 Haths from the surface. This uncertainty renders the undertaking of sinking a Well (in most situations) one of great risk, thó they are probably more durable when made.

5th. In a few situations equally remarkable, facilities exist, water being found in abundance at from 6 to 15 Haths from the surface, and without the usual obstacles of rocks. In these situations, Wells are not only less expensive at first, but the water can be afterwards raised at a proportionably smaller expense, according to the diminished distance the bullocks have to walk in drawing them.

6th. Having thus stated, what appears necessary to explain, the peculiarities of situation, I shall notice a few general considerations, which seem to me essential to form a consistent opinion on this subject.

7th. Tanks and water courses from streams, infavorable seasons, afford the cheapest means of irrigation, but seem to be erroneously considered, as a resource in years of scarcity, from the failure of rain; because they are principally dependant on the periodical rains for their supply, and must therefore generally fail when most needed. They are in this respect inferior to Wells which seldom fail from one season of deficient rain, and our experience here has shewn that many of them will last for two, and even nearly three years of draught, without drying up, or even having their supply much diminished. This quality renders Wells particularly valuable in a country like the Deccan, which seems liable to draught.

8th. From the enormous difference, both in the original cost, and afterwards in the expense of working deep and shallow Wells, we might expect that few, or none, would be made in difficult situations, until all the favorable ground had been occupied; and since we do not find this to be the case, we may conclude, that it has arisen from local regulations, which have prevented the employment of capital in the most profitable situation by absorbing all the advantage; a mistake that would be avoided by either of the plans proposed by Messrs. Chaplin and Norris.

9th. I agree with Mr. Chaplin however, in thinking, that the encouragement offered by the rules proposed by Mr. Norris, would be ineffectual, as they offer advantages much inferior to what are actually enjoyed by people who now make such improvements, as explained in the 2nd Paragraph of Mr. Chaplin's letter of 17th March 1825, but in the succeeding paragraph, he seems to lose sight of the principal object of making new Wells, by supposing the profit to depend on good seasons, whereas it is in bad years, when crops could not otherwise be produced, that Ryuts expect to be reimbursed for the expense.

10th. There is however another impediment to the success of Mr. Norris' plan: it is now well enough understood, that the profits derived from agriculture in this country, are little more, and perhaps not unfrequently, less than the ordinary rate of wages in the country, at all events that the employment of hired servants in agriculture is seldom advantageous, and there are few families

sufficiently numerous to work two Wells, so that the subsidiary Wells would rarely be desired.

11th. The minute subdivisions of property, where the soil is good, and fit for Well cultivation, would also be a further impediment, as no man would like to dig a Well in another's ground, and few *Teekas* in such situations, would be found sufficiently extensive to afford room for two Wells.

12th. The advantages afforded by Mr. Chaplin's plan, would be more likely to succeed at first; but if Meerasdars are allowed to make Wells, without paying any increased revenue, it is obvious, that Government Ryuts cannot long stand the competition of the Meeras lands, either actually occupied, or liable to be claimed by Meerasdars, as they very much exceed the Government lands in extent, and Wells would naturally be multiplied on them to the ruin of Government Ryuts, who pay a Pagout rate of Revenue, and must in time reduce the profits from Well cultivation to (what perhaps it ought not to have exceeded in the present state of the country) reimbursement for the capital expended in making the Well.

13th. I have seen a proposition of Mr. Pringle's, but do not recollect the details which (if it could be properly applied) would, I think, be the best system I have heard of, for assessing Well cultivation; namely, to levy the revenue on the principle of rent, by taking no more than the difference between the profit of Wells in the best, and worst situations, to which the wants of the community had extended them; and if capital had been allowed to flow in its natural course, so that the most advantageous situations had been first occupied, this application would not have been so difficult; but in the actual state of the country, some other expedient must be sought to determine this point.

14th. After much consideration, I can think of none better, than to view a Well like any other mercantile speculation; to reckon the return to be derived from the expenditure, and to assume the profit it will yield after payment of interest, and a small provision for the liquidation of capital, to be the legitimate amount of revenue which may fairly be taken. This estimate will not be quite correct, because with the increase of Well cultivation, its value may be expected to diminish, but the advantage of more land being watered with the same labour from shallow and cheap Wells continue to give them a decided preference over the expensive or deep ones, which is desirable, and a great change must take place in the rate of interest, before it falls much below the rate assumed in the following scale.

15th. The rates of interest at which money can be procured by cultivators, vary from 12 to 36 per cent, so that at the lowest rate of interest, a Well that cost five hundred Rupees, would require

a profit of upwards of Sixty Rupees annually, to repay the interest and principal; and from the best information I can obtain. I do not believe that a much larger profit than this could be realized on an average of seasons; I would therefore propose, that a Well which cost Rupees 500, should be taken as the limit, and that Wells which cost less than that sum, should pay in proportion to the diminished expense.

16th. It appears, that on an average, about 8 Beegas of ground can be watered from one Well, and I would therefore propose the following scale, calculated on the principles I have endeavoured to explain.

		Rs.	Qr.	rs.
Lands irrigated from a Well which cost,	Rupees 500, to pay	0	0	0
Ditto	Ditto 400 do	1	1	0
Ditto	Ditto 300 do	2	2	0
Ditto	Ditto 200 do	3	3	0
Ditto	Ditto 100 do	5	0	0

17th. It may be as well to observe, that thó I have viewed Wells entirely in the light of a mercantile speculation, there are other considerations which will induce cultivators to wish for them, on their own grounds: in the first place, every Native regards his Well as a resource, in case of failure of rain, and in the second, cultivators must keep bullocks for the cultivation of their Jeraeet (the produce of which is brought to maturity by the periodical rains) whether they employ them during the intermediate months or not, and it therefore costs them little more to work at Wells during the dry season, and it may even be a great object to do so, for the sake of fodder alone.

18th. It is therefore probable, that many Wells will be made, where no advantage is expected, as a mere profitable speculation, but since all these objects are such, as Government would wish to encourage, I suppose it will be a recommendation to the plan, that it provides for their attainment on easy terms.

19th. One effect of the alteration proposed, remains to be considered: if it shall be successful in promoting a great increase in Well cultivation, we must expect, that the present Wells, held on less advantageous terms, will be suffered to decay, and a gradual reduction of revenue will take place from this cause, but there can be no difficulty in perceiving, that if this effect ever is produced, we shall gain in one way what we lose in the other, it will only remain, then for Government to determine, how far this natural change would be interfered with, for the sake of relieving the holders of old Bagout, from their present revenue, in proportion as it becomes too heavy for them to bear.

On the 12th of October 1826, a circular was addressed to the several Collectors in Guzerat, in the following terms.

In reference to the extract of the report from the Revenue Surveyor in Guzerat, dated the 30th September 1825, paras: 16 @ 28, transmitted to you in Mr. Secretary Farish's letter of the 17th of June last, proposing a scale of exemption from additional Assessment to be allowed to persons sinking new Wells, for such period of years as may be sufficient to reimburse them for the original outlay of capital, with compound interest; I am directed by the Honble the Governor in Council, to call upon you, for your opinion, as to how far, such scale may be applicable to your district.

2nd. It being also desirable, that after the expiration of the period of exemption, the Assessment on this irrigated land should be so moderate as to hold out sufficient encouragement to the Ryut, to induce him to engage in speculations of such importance to the prosperity of the country, in preference to any other employment of capital, you are therefore requested to state, whether any, and what reduction in the present rate of Assessment, would in your opinion, be sufficient to effect this object.

Under the same date (viz. 12th of October 1826) a circular was addressed to the several Collectors in the Deccan, as follows.

In consideration of the importance to the prosperity of the country, of artificial irrigation, in seasons of drought, the Hon'ble the Governor in Council has been pleased to establish certain rules, for the encouragement of Well cultivation on equal and uniform principles, a copy of which I have now the honor to transmit for your guidance, in the case of all persons sinking new Wells, and who are not already entitled by their tenure to exemption from additional Assessment.

2nd. You are also requested to state, for the information of the Hon'ble the Governor in Council, how far the same principles might, in your opinion, be extended to Meerasdars, without prejudice to the rights and immunities peculiar to that class.

3rd. You will perceive it to be the object of these rules, to tax only the clear rent of Wells, after allowing the fullest profit to the projector, on all expenditure of capital, whether permanent or annual, and as a further encouragement, to such improvements, to leave one third of the clear rent to the proprietor, and to exact only two thirds on account of Government.

4th. With a view to prevent any undue proportion between the annual profits and assessment of Wells, arising from the difference of original cost, it appears desirable, that all permanent outlay of capital should be redeemed, by exemption from additional

assessment for a period of years, rather than that it should remain an annual charge on the produce; but from the nature of the soil in the Deccan, and the great variations in the original cost of Wells of similar dimensions and materials, and in the quantity and value of the produce irrigated under them, it is impossible to form any scale of exemption, which would be equally applicable to all Wells, with reference only to their depth and construction; all that can be attempted, is, to determine the period of exemption under any given circumstances of original cost and annual profit, the ascertainment of these circumstances being reserved for special inquiry in each individual case; and in order to facilitate the application of this principle, I am directed to transmit for your guidance, the accompanying Table, framed for that purpose.

5th. As the success of this plan must depend, in a great degree, on the accuracy with which the cost of the Well, and the profits and expense of cultivation under it are estimated, you are requested to give your particular attention, to prevent any errors in these points, arising from the negligence and ignorance of your district officers, on whom that duty will devolve; and as an example of the manner in which it is desired that such estimates should be formed, I have the honor to furnish for your information, an extract from the accounts of Well assessment in the Purgunnah of Sewnair.

6th. The extent and situation of the lands irrigated under Wells, being in some cases liable to annual variation, it has been provided, that the additional assessment shall be imposed in the form of a Well tax, *Veer Hoonda*, rather than as an increase in the rent of the land, which will continue to be assessed at the dry rates. This arrangement will also facilitate the separation of the garden and dry land rent, in the event of the Well not being worked, when the latter only should be exacted.

7th. With a view to prevent any inequality between the Assessment of new Wells constructed on the terms now proposed, and of those already in existence, which might lead to the abandonment of the latter, the Superintendent of the Survey Assessment has been instructed to fix a Veer Hoonda, on similar principles, for all old Wells, the proprietors of which are not entitled, by their tenure, to exemption, or limitation of Assessment.

8th. Although the present plan bears reference, more especially to Well irrigation, yet as it is presumed, that with due allowance for the greater expense of repairs, it may be equally applicable to Tanks, Bunds, and Boorkees, on the banks of rivers, when such works are undertaken by private individuals, and the supply of water is sufficiently permanent to make them fit objects for special encouragement.

9th. You will extend the same rules to these cases also, unless, where from the magnitude of the work, or any other considerations,

a different system may appear to you more eligible, in which case you will be pleased to report the circumstances, for the special consideration of Government.

Rules for the regulation of Well tax, and encourgement for Well cultivation, in the case of all persons not entitled by their tenure to exemption from, or limitation of, Assessment.

1st. Any person sinking a new Well in unappropriated land, shall receive a grant in Meeras, of not less than 20 acres, or more, at the discretion of the Collector, if it be possible, in the neighbourhood of the Well, if not, in some other convenient situation, subject to the usual terms of the tenure, and the provision in regard to Well tax, hereunder detailed.

2nd. Land irrigated under Wells, shall be assessed at the dry land rate, and a tax shall be imposed on Wells, as hereunder detailed, but shall be levied only when the Well is in use.

3rd. An estimate shall be made of the produce and expense of cultivation under each Well; and of the net profit, after deducting the dry land rent of the land, two thirds shall be considered the Government rent of the Well, and one third shall be enjoyed by the proprietors.

4th. An estimate shall be made of the cost of new Wells, and the realization of the Government rent shall be forborn for such a period as may be sufficient to reimburse the proprietor for his outlay, at twelve (12) per cent, compound interest, according to a table framed for that purpose; or in perpetuity, where the interest exceeds the rent.

5th. The rent of the old Wells, the proprietors of which are not already entitled by their tenure, to exemption from Well Assessment, if already higher than they would pay, according to the third article, shall be reduced to that rate; and if lower, shall be raised to it, except where they have not enjoyed such lower rate sufficiently long to reimburse them for the original outlay, in which case they shall be allowed an exemption for a number of years sufficient for that purpose.

6th. Exemption from Well tax, under the above rules, whether for a limited period, or in perpetuity, shall be allowed only to the original proprietor of the Well, or to persons holding through him, by an inheritance, purchase, mortgage, or gift.

Extract from the accounts of Well Assessment, in the village of Neemgam, Sawa, Turfalee Purgunna, Sewnair, 27th of June 1826.

PRESENT.

Ragonath Radoram.... ....Assessor.
Wisswanath Patel..... ....Government Malie.
Ramjee..... ....Do. Gowndee.

Villagers of Neemgam..... Chand Patel. Bab Patel. Kondajee Chowgulla. Mookoond Seuram Kulkurree. Neefoojee Potedar. Gundjee Guheeny, owner of Well.

Ryuts of neighbouring villages Koosajee Dackur Patel of Soultanpoor. Dhunnajee Alkaree Patel of Seerube.

NUMBER 14.

Goondjee Guheeny's gutcoob-sthal, named Seeras; contains 40 village beegas, and 19 measured acres; in which is one Well in good repair, made 40 years ago; materials, burnt bricks, cemented with mud; depth, 12¾ Guz, vizt.

	Depth.		Diameter.		Circumference.		Circular Superfice.		Solid Contents.	
	Guz	Tussoo.	Guz	Tussoo.	Guz	Tussoo.	Guz	Tussoo.	Guz	Tussoo.
Built with burnt bricks and cemented with mud....	9½	..	4½	..	14	..	130		..	..
Excavated in rock.....	3½	..	4	..	12	13½	..	..	43	23½

Original cost Rupees 392 0 92½ vizt.

	Rs.	Qr.	rs.
Excavation of 43 solid Guz of rock of the 2nd degree of hardness, at Rupees 3 per Guz.....	131	3	62½.
Interior facing of brick, cemented with mud 130 Guz, 9 Tussoo, vizt.			
Guz Tussoo. 43 23¾ Rubbish for filling up, taken from, at Rupees 1 2 69 per Guz... ..73 2 15			
Guz. Tussoo. 86 14½ Rubbish for filling up, brought from without, at Rupees 1 3 29 per Guz. 156 3 30			
Total 230 1 30	230	1	30
Excavation of earth, depth 8 Guz diameter, 6½ Guz, at Rupees 2½ per Guz of depth.. ..	20	..	..
Mason work for the place from which the bag is suspended.....	10	..	..
Total———	392	..	92½

Estimate of produce.

Water is found at the distance of 9 Guz from the surface, and is 3 Guz in depth, which is sufficient to irrigate three acres constantly for the whole year, the produce of which is as follows:

	Rs.	Qr.	rs.
Sugar cane 1½ acre producing 37½ caldrons full of juice, which at 1 maund of sugar per caldron gives 37½ maunds, at Rupees 4 per maund (according to an average of price from the Banyans books) Rupees 150, from which deduct one tenth for occasional failure, Rupees 15, and there remains	135	..	..
Vegetables, &ca.			
Chillies ½ an acre, producing 1½ candy, at Rupees 10 per candy	15	..	..
Sweet Potatoes ½ an acre	12	2	..
Onions ½ an acre, producing 5 candies, at Rupees 2 per candy	10	..	..
Second crop of Bajaree, after Onions and Potatoes, 1 acre 3 maunds	6	..	..
Total———	178	2	..

Estimate of annual expense.

Sugar cane plants 15,000, at ½ Rupee a thousand	15	..	..
Manure 45 cart load, at ½ Rupee each, viz. For sugar cane 30 cart load, for other produce 15 ditto. Total 45	22	2	..
Water bag and rope	7	2	..
4 Bullocks, at Rupees 15 each, Rupees 60, which being calculated to serve only 7 years (the well being deep) the annual charge is one seventh	8	2	..
Expense of weeding	7	2	..
Maintenance of 2 men, at 1 seer of grain a day	30	..	..
Hire of caldron for boiling sugar	4	2	75
Total———	95	2	75
Interest for one year, @ 12 per cent	11	2	..
Net produce of three acres of dry land is here added to these, as the Ryut has to pay the dry land rent	9	..	..
Total outgoings——	116	..	75
Net annual profit of Well cultivation	62	1	25
	178	2	..

The net profit of the Well is Rupees 62 1 25, from which after deducting one third, as the Ryuts share, there remains two thirds, or Rupees 41 2 16 as Government rent: but this sum being insufficient to pay the interest of the original cost at 12 per cent, is remitted in perpetuity.

Table for calculating the number of years exemption from Well assessment, necessary to redeem the original cost of a Well, under any given circumstances of original cost and annual rent.

Amount of original cost which will be redeemed in any number of years from 1 to 50, at an annual rent of one Rupee Interest, being at 12 per cent.

Years.	Cost Rupees	Decls.	Years.	Cost Rupees	Decls.	Years.	Cost Rupees	Decls.
1	..	8928	17	7	1193	34	8	15656
2	1	6900	18	7	2497	35	8	17550
3	2	4018	19	7	3657	36	8	19211
4	3	373	20	7	4694	37	8	20751
5	3	6042	21	7	56200	38	8	22099
6	4	1113	22	7	66032	39	8	23303
7	4	7899	23	7	74600	40	8	243777
8	4	9676	24	7	78432	41	8	253571
9	5	3277	25	7	84314	42	8	261987
10	5	6492	26	7	89565	43	8	269588
11	5	9378	27	7	95255	44	8	276118
12	6	1943	28	8	98442	45	8	282516
13	6	4235	29	8	1238	46	8	287960
14	6	6281	30	8	5514	47	8	292827
15	6	9109	31	8	8498	48	8	297163
16	6	9740	32	8	11159	49	8	301078
		....	33	8	13728	50	8	304443

To ascertain the number of years of exemption, under any given circumstances, of original cost, and annual rent, divide the cost by the rent, and in the above table, under the column of cost, find the next highest sum to the quotient, then in the opposite column of years, is the number of years. Thus if the original cost of a Well be Rupees 148 and the annual rent Rupees 23, then $148 \frac{0}{23}$ 60869: the next highest sum to which in the table is 61943, and the number of years is 12.

N. B. Should the quotient exceed the highest sum in the Table, the rent is to be exempted in perpetuity.

The records do not furnish any reply to either of the foregoing circulars.

The following is an extract from the report of Mr. Boyd, Acting Collector of Ahmednuggur, on the revenue settlement of that Collectorate, dated the 23rd of September 1829.

I now beg to propose, and recommend an offer to the people, extremely simple, and as I believe, holding forth every inducement to the Ryuts, and at the same time, not losing sight of the interests of Government.

It is, that a fourth of all new land, brought under irrigation, be given in perpetual Enam, upon condition of keeping up the cultivation of the remaining three fourths.

That the *Ryuts* are to keep up, as at present, the Wells and water courses.

That the Coombee is to receive a Meeras Puttee, for the remaining three fourths of the land irrigated.

On the 30th of November 1829, Mr. Dunlop, Captain Robertson, Mr. Pringle and Mr. Giberne, were called on, for their opinions, as to the expediency of adopting the proposals made in the foregoing paragraphs.

On the 4th of December 1829, Captain Robertson (who had in the mean time assumed charge of the Office of Principal Collector of Ahmednuggur) reported, that he considered Mr. Boyd's plan very judicious, and proposed to circulate to the Ryots, proposals for sinking Wells founded thereon.

On the same date (4th December 1829) Mr. Pringle wrote on the subject, as follows.

The plan proposed by Mr. Boyd, appears to me to be more simple and more practicable, but neither so comprehensive, nor so precise in its provisions, as that laid down in the orders of Government, as communicated in Mr. Secretary Reid's circular letter of the 12th October 1826, with reference to which the Well Assessments are now being made throughout the Deccan.

On the 15th of December 1829, Mr. Giberne, the Collector of Poona, replied to the call as follows.

Dependant as we are, particularly in the Zillah, for our revenue, on the fall of the rains, I think that we cannot offer too much in the encouragement of irrigation, even to a small reduction in the full rent of dry land in a good year, but the advantages held out should be enjoyed equally by those who do now hold Baghayet land, as well as those who would hold it. Mr. Boyd's proposal leaves the

present proprietors of Baghayet land in *statu quo*, and if the plan proposed was to act with effect, the increase of the produce of irrigated land would become so plentiful, that the present Baghayet holders would be thrown out of the market.

No general rule will apply to so many districts of different soils, capabilities, &c. as are under Bombay; in this Zillah a considerable quantity of irriagated land is not taxed higher than the dry land, on account of the extraordinary labour and expense in watering it: many of the Wells are unused, were the tax collected on the whole capable of being brought into use in this Zillah, the sum would not amount to more than 20 or 25,000 Rupees; the present receipts are much less than this amount.

I should most strongly recommend the encouragement of irrigation in this Zillah, and in addition to the advantages held out to new speculators, would beg to recommend, that some little advantage be given to the present holders, either by remitting the tax, which is trifling, or by allowing a small Enam to every Well, on condition of the land being irrigated: a fourth of the land irrigated, as proposed by Mr. Boyd, appears a fair proportion; the same was suggested by Mr. Chaplin, on digging new Wells, and I understand the system of granting a portion of land in Enam is in force in the Nizam's territory in the south, if not in our own more southern districts.

On the 1st of May 1830, Mr. Dunlop replied to the call as follows.

This proposal is not so favorable as the terms already sanctioned at the recommendation of Mr. Pringle, it is equivalent to reducing the assessment one fourth, whereas Mr. Pringle's plan provides for the whole cost of Wells being first paid with interest, before any revenue be levied by Government, from the additional produce raised by irrigation, and afterwards, that third of the assessment payable from the land irrigated under the new Well, shall be remitted. I do not therefore think, that any benefit is likely to result from adopting Mr. Boyd's proposal.

The following is an extract from the Jummabundy Reports of Mr. Boyd, the Collector of Candiesh, dated the 1st of August 1830.

As irrigation is a point of great importance in this province, I would recommend, that the greatest liberality should be extended to the Well cultivation, the rates of which are certainly still too high.

The average rate of garden land, watered by Wells, is 7½ Rupees, which there can be no doubt, occasions the disuse of many Wells.

I am of opinion, that the profits of Well cultivation are not so great as are generally supposed; the difference in the expenses of working between Baghayet and Zirayut is so great, that except in the cases of very valuable produce, such as sugar cane, and rice, the return is very moderate, and those crops can only be planted by men of capital, even if the ground rent was nothing.

It may be a question, whether or not, under certain restrictions, it would not be better to tax Motusthal lands for a few years, at the highest rate, merely of the Zirayut land in the Purgunnahs, providing that the Ryut in receiving a Well at the reduced rate, should keep up also his Zirayut cultivation, and hold both as a Moond, or small farm.

Mr. Dunlop, the Revenue Commissioner, remarks on the foregoing, as follows.

The 39th to 41st paras: contain proposals for the encouragement of irrigation, which no doubt is of primary importance; the Collector also considers the rates of Assessment, for this, too high, and proposes that Ryuts should be allowed to cultivate, both Mothustul and Zirayut (land irrigated from Wells, and without the means of irrigation) at the same rates, on condition of taking the Mothustal cultivation, in addition to what they already hold: this would operate as a material reduction of Assessment, but would also tend to force cultivation, which should now be especially avoided; I should prefer any mode of reducing the rates (really too high), unclogged by such conditions.

Government deferred giving any orders on the subject of the two preceding extracts, until the receipt of other reports, which were then expected.

On the 19th of January 1831, a Petition, which had been received from the Ryots of the village of Chakun, representing that the tax fixed upon their Wells by the Revenue Surveyor, was much beyond what they were able to pay, was referred to the Collector of Poona for his report, and on the 13th of March 1831, Mr. Giberne, the Collector, replied to the reference as follows.

In reply, I beg to hand up the copy of a letter from my First Assistant, Sir R. Arbuthnot, dated the 25th ultimo, relative to the cause of complaint, and to state, that as the principles upon which the Well tax was fixed, are the same in this case as in all others, there is no reason for making a distinction in favor of one.

But I do most respectfully recommend the abolition altogether, of the Well tax, throughout this Ziliah, in consideration of the numerous advantages to the Government and to the people, which irrigated land bears in comparison with dry land, every encouragement should be given to artificial irrigation, and instead of taxing the water, whereby we check the advantages, we should otherwise gain in many different ways, I should respectfully recommend a premium to be given. Water is the great desideratum in the Deccan, a land which boasts of a climate favorable to the production of the most valuable commodities, provided water is forthcoming. Government is anxious to promote the introduction of valuable produce in every way, but none I conceive, is more certain of gaining this object, of improving the resources of the country, than encouraging by every means the irrigation of the land; I should almost recommend a reduction in the rents of dry land, when turned into garden land, sooner than adding by a Tax a check to its extension, it is not the mere glance at figures in the accounts, which should decide this measure, in regard to the revenue, for the greater the extension of irrigation, the greater the receipts in the revenue from Taxes on more valuable produce, and the greater the facility for obtaining a sale for the common produce, as its quantity is reduced. I beg to enclose an account of the sum of the Well tax in each district.

This letter has been detained in consequence of the delay in obtaining the annexed statements, the accounts for which were not completed. The Right Hon'ble the Governor in Council will observe the very considerable falling off in the revenue derived from the Veer Hoonda, or Well Tax, in Fuslie 1240, compared with that of Fuslie 1239, with the exception of the district of Paubhal, which increase may be principally attributed to a more particular investigation into the tenancy of the Wells, as there are as many as 63, which if held by their proper proprietors, would pay nothing. I beg to state, that complaints are loud and general, thoughout the Zillah regarding this Well Tax, the operation of which is quite new; I most strongly recommend its total abolition, in consideration of the peculiar nature of the country, and the advantages derived from irrigated land alone; over dry land, the greater certainty of the realization of the revenue, the disgust which a new Tax of this kind causes, and the probability, that the check will eventually cause all the Wells to be thrown up, which will act as a fatal bar to the improvement of the country.

The following is a copy of the letter from Sir R. Arbuthnot, alluded to in the foregoing.

In reply to your letter of the 21st instant, calling on me, for any remarks I have to offer on the subject of a Petition from the villagers of Chakun, regarding the Well Tax now imposed, I have the honor to state, that during the late settlement of the revenue, almost all the proprietors of Wells, through the districts under my charge, made Petitions for a remission of the Tax, stating in general, that it was higher than they could afford, and if insisted on, that they should be obliged to give up the cultivation of their lands by irrigation; my reply to them always was, that the measure was one, Government was determined to enforce, and that I was sorry I could not excuse it, but in consideration of its being a new imposition, I agreed to allow them a period of 10 years, to pay the full amount, on their giving me security for its regular payment, which in general was agreed to; I believe in the hopes that, before the tax becomes heavy, it would be abolished. In some cases before obtaining security, I had to promise to write to Government, to ask a remission in behalf of the proprietors, who I engaged, should only be subject to the Assessment, if my reference was unavailing.

The present Petitioners I believe, were among this number; the Wells in their village are many, and some of them highly assessed, but the Tax was uniformly fixed on the same principles through the whole country, and they have no greater reason to complain, than every one else.

In reporting on the settlement for this year, it was my intention to have brought this subject forward, and I trust, as it is now before Government, it will meet with proper attention. The importance to the prosperity of the country, of artificial irrigation, is too apparent, to need any comments. In my opinion, every obstacle to prevent its extension, is injudicious, and I humbly suggest, should be abolished, and further, that the fullest encouragement be given by the abolition of all taxes, to men of capital, to invest their money in the production of the more valuable articles of Silk, Tobacco, Sugar, and Coffee, which this climate is well adapted for, and for which an abundant supply of water is absolutely necessary.

In regard to the total remission of the Well Tax, my opinion also is, that the Government Revenue will not suffer by the measure, as the Proprietors of Wells, being generally substantial Farmers, are enabled to carry on at the same time a considerable extent of dry land cultivation, from which a Tax is derived, and which, if the Well assessment is enforced, they will be obliged to throw up.

The following is the Statement alluded to at the conclusion of the foregoing letter from the Collector of Poona.

No,	Names of Districts.	Number of Wells on which Tax is leviable.	Number of Wellsactually in use 1240 Fusslie.	Total amount of Tax.	Jummabundy of the new Survey Tax leviable Fusslie 1239.	Jummabundy of the new Tax for Fusslie 1240.
1	Purgunnah Sewnere.	194	69	2206	1293	962
2	Ditto...Indapoor..	228	73	3516	1804	1099
3	Ditto..Kheir.....	73	22	1477	968	711
4	Ditto..Paubhul....	51	16	480	322	1085
5	Ditto..Poorundhur.	104	32	763	1239	716
6	Ditto..Bheemthurry	88	22	758	631	396
7	Ditto..Havailly....	158	64	3852	No Jummia.	1388
8	Ditto..Maweil.....	2	..	27	Do..... ..	None
9	Ditto. Mohole.....	..	..	..	Do..	..
10	City of Poona.....	11	4	404	Do..... ..	70
		909	302	13483	6307	6427

On the 14th of May 1831, copies of the foregoing papers, were referred to the Revenue Commissioner, and to the Superintendent of the Revenue Survey and Assessment, for their opinions, on the recommendation of Mr. Giberne.

Mr. Pringle, the Superintendent of the Revenue Survey and Assessment in the Deccan, replied to the above mentioned reference, in a letter dated the 24th of May 1831, as follows.

I have the honor to acknowledge the receipt of your letter of the 14th instant, transmitting for my opinion and report, a suggestion

of the Junior Principal Collector of Poona, for abolishing the Well tax in his districts.

2. As the shortest way of putting the Right Hon'ble the Governor in Council in possession of the merits of this question, I should refer to the correspondence, which has already passed upon it; copies of which, in as far as it is to be found on the records of this Office, I annex for facility of reference.

3. No. 1, is a memorandum which I drew up about five years ago, at the request of Mr. Elphinstone, and after communication with him, as the basis of a general measure, which he wished to frame on this subject, with reference to the proceedings which had at that time been had upon it, I believe this document was never regularly placed upon record, but I have annexed it for the better elucidation of those which follow. No. 2, with its accompaniment, is a letter which I drafted, also by Mr. Elphinstone's orders, upon the above memorandum, and which, after receiving the sanction of Government, was circulated, through Mr. Secretary Reid, to the Collectors. Nos. 3 and 4 are a reference from Mr. Secretary Bax, and my reply regarding an undecided point in that letter. No. 5, is an extract from my general report of the 6th September 1828, relative to the operation of the tax, where its settlement had been effected.

4. From the perusal of these documents, his Lordship in Council will perceive, that the present system of Well taxation, has not been lately and hastily adopted, but is the result of a deliberate and well considered plan, and its execution, in the districts which have been settled, has been completed at a heavy cost of time, labour, and money. It remains to consider, the arguments upon which, at this time of day, the Junior Principal Collector of Poona would recommend its abolition.

5. These arguments may, I think, be comprised in the proposition, that irrigation is productive of great advantages, and its extension will be discouraged by a tax. The advantages, have been appreciated by Government, and its encouragement provided for to the extent which was deemed expedient. The operation of the tax, as a check to the production of the article, upon which it falls, is common to all taxes. The argument is equally valid for the abolition of the land tax, operating as that impost undoubtedly does, to the discouragement, of the useful processes of ploughing and harrowing, the question appears to me to be one between the gardiner and the ploughman, in which, although I can very well understand, why the former should wish to transfer his share of the public burthens to the latter, I do not so readily perceive, why Government should consent to the arrangement.

6. I am therefore of opinion, that upon grounds of political economy, the Well tax should not be abolished, whether its trifling

amount, together with the dissatisfaction arising from the novelty of its form, should constitute a better reason for its abolition, is a point which Government has already decided in the negative, and in case it should wish to reconsider its opinion, I have only to add, that the annual cost of such a concession to prejudice, in the country now settled, would be about half a lac of Rupees.

Memorandum of Well cultivation, drawn up for Mr. Elphinstone's information, and the basis of the resolution afterwards adopted by Government.

1st. In as far as regards the revenue and wealth of a country, it may not perhaps be desirable to hold out to Well cultivation, or any other particular kind of cultivation, such encouragement as would attract to it a greater portion of capital than in the natural state of things it might command. But in this country, the importance of artificial irrigation, as a protection from the evils of drought, is such, as to justify a departure from the general rule.

2nd. It is true, that whatever present sacrifice Government may make, in order to effect this object, will probably, by increasing this particular kind of produce, tend ultimately rather to benefit the consumer in the reduction of price, than the grower in the rise of profits. But, when the Government revenue is preserved from diminution by the increased number of contributors, and the object attained of extending Well cultivation, although the Ryut may not be directly benefitted, yet if his profits are not diminished, as they will not be, it should be no objection to the measure, that the chief advantage will be derived by the consumer.

3rd. The utility of encouragement being so obvious, it is of importance to ascertain, in what way it may be applied with the most extensive and permanently beneficial effects, and this would appear to be attained when the whole amount of encouragement is most equally distributed among the different speculators, according to the extent of their undertakings.

4th. Several plans for the encouragement of Well cultivation have been submitted to Government; among these is one from Mr. Norris, proposing that a Ryut, who already possesses a Well should, on sinking a new one, continue to hold both, at the rate of 3rds of the present Assessment, Government thereby gaining an addition of $\frac{1}{3}$rd to its revenue, and the Ryut a reduced rate of Assessment, while provision is made against the abandonment of old Wells in favor of the new.

5th. The tendency of this plan, is no doubt beneficial, so far as it goes, but from the inequality of its operation, the benefit is not so widely diffused, as under a better arrangement it might be.

6th. The objections to it are : 1st. That the Ryuts, who already possess no Wells, and who are the very persons who most want them, would be unable to avail themselves of it. 2nd. That grds, or any other proportion of a given rate would, in the Deccan, where the result of the speculation is so uncertain, in some cases, leave a higher bounty than the object required, and in others, would involve the Ryut in ruin, as he would not only be a loser on the new Well, but according to the 5th paragraph of Mr. Norris's letter, would not be entitled to a reduced Assessment on the old. 3rd. If the old Wells are already over-assessed, which the plan seems to suppose, no relief would be afforded to those Ryuts, the limited extent of whose capital, or the nature of whose estates would not admit of their extending their Well cultivation, while the advantages granted to others, would lower the general rate of garden profits.

7th. The plan proposed by Mr. Chaplain is, that to every Ryut sinking a new Well, a certain portion of land should be granted, partly in Meeras, and partly in rent-free Enam, and that the amount of the latter, should be regulated by the cost of the work.

8th. Of the merits of this plan, in as far as regards the relative proportions of encouragement and risk, there is not sufficient information to enable me to judge. But it may be remarked, that the extent of profit it holds out, will depend in a great measure, on the quality of the land, and therefore will be unequal.

9th. A stronger objection exists to the total alienation of the revenue of a portion of the land, and throwing all the weight of the increased Assessment on the remainder, which would lead to the inconvenience now experienced in the dry land rates, by which portions of an estate heavily taxed, in consideration of other portions being lightly taxed, are liable to be abandoned by the cultivator. The general diffusion of a reduced Assessment, over the whole land would give greater stability to the revenue, and would, I think, operate with equal effect as an encouragement.

10th. Mr. Dunlop proposes, that the amount and relative proportion of Well Assessment, should be regulated by the net annual profit, after deducting interest on the original cost, and a small provision for the gradual liquidation of the principal.

11th. This would be an equal, and so far, a good arrangement, but limiting, as it does, the benefit of the speculation to a bare mercantile profit, it appears to offer no such advantages over any other employment of capital, as might encourage the extension of Well cultivation.

12th. In forming his scale of rates, also, with reference to the profits, Mr. Dunlop appears to have taken into consideration only the difference in the original outlay, and to have overlooked the difference in the quantity and the cost of produce under different Wells.

13th. With due allowance on this account, however, and a sufficient moderation in the rates, to leave something more than a profit to the Ryut, the plan seems well calculated to promote the increase of Wells on equitable principles.

14th. The profits of a Well, before they can become a fit subject of taxation, should yield a fair return on two distinct capitals; the fixed capital employed in the original construction of the Well, and the circulating capital employed in the annual cultivation under it. Of these, it seems desirable, that the first should rather be redeemed by an exemption from Assessment for a stipulated period, than that it should remain an annual charge on the produce, and, the Assessment, then bearing reference to the latter only, would be more exactly proportioned to the net annual profit, and there would exist no inducement to abandon the cheaper, and therefore more highly assessed Wells for those which were originally dearer, and therefore more lightly assessed, a case which might possibly occur under Mr. Donlop's plan.

15th. The system of exempting new Wells, from additional Assessment, for a period of years, appears to have been adopted in practice by Messrs. Williamson, Crawford, and Thackeray, and the success of the measure would depend on the accuracy with which the scale of exemption was proportioned to the original cost and annual profits of the work.

16th. A plan, for the attainment of the same object, was proposed by the Revenue Surveyor in Guzerat, which appears to be founded on the fairest and most accurate data. The principle adopted by Captain Cruickshank, may, I think, with some modifications, be well calculated for general application.

17th. In Guzerat the original cost and annual profit of a Well, of any given construction, would appear from Captain Cruickshank's report, to be much more capable of previous calculation than in the Deccan, where, from the nature of the soil, the success of such speculations, is a matter of the greatest uncertainty, varying often in the same village, from a high rate of profit, to a positive loss. A scale of exemption, therefore, regulated to the depth, diameter, and materials of the well, might be well adapted to Guzerat, where the cost and the profit of Wells similarly circumstanced in all these respects, might be very nearly equal. But in forming a scale for general application in the Deccan, all that can be attempted, is to determine the period of exemption, under any given circumstances of original cost and annual profit, the ascertainment of these circumstances being reserved for special enquiry in each individual case, such a scale will afford less certainty to the speculator, than that proposed by Captain Cruickshanks, but that defect is to be ascribed to the physical circumstances of the country, and not to any error in the principle.

18th. With a view to the equalization of the Assessment, on these principles, and the general encouragement of Well cultivation, the following is an outline of the plan I should have to propose in the case of all persons not already entitled by their tenure, to exemption from Well tax.

1st. That the Well Assessment should be distinct from the rent of the irrigated land. This is proposed, because the annual extent of irrigated land is liable to variation, and also to facilitate the separation of the garden and dry land rent, in the event of the Well not being worked, when the latter only should be exacted.

2nd. That all persons sinking a new Well, in unappropriated land, should receive a grant in Meeras, of not less than 20 acres, or more, at the discretion of the Collector, subject to the usual terms of the tenure, and the provisions, in regard to Well tax hereunder detailed..

3rd. That an estimate should be made of the value of the produce and expense of cultivation under Wells; and that, of the net profit, after deducting the Zerayet rent of the land, two thirds shall be considered as the Government rent of the Well, and one third as the rent of the proprietor.

4th. That an estimate should be made, of the cost of new Wells, and the realization of the Government rent forborne for such a period, as may be sufficient to reimburse the proprietor for his outlay, at 12 per cent compound interest, according to a table framed for that purpose.

5th. That the rent of old Wells, the proprietors of which are not entitled by their tenure to exemption from Well Assessment, if already higher than they would pay, according to the third article, should be reduced to that rate, and if lower, should be raised to it, except where they have not enjoyed such lower rate, for a period sufficiently long, to reimburse them for the original outlay, in which case they should be allowed an exemption for a number of years sufficient for that purpose, before being brought upon the full rent.

6th. That exemption from Well tax, under the above rules, whether for a limited period, or in perpetuity, should be allowed only to the original proprietor of the Well, or to persons holding, through him, by inheritance, purchase, mortgage, or gift.

19th. By the above plan, the extent of encouragement to Well cultivation amounts to ⅓rd of the water rent, and is equally open to all Well proprietors not entitled to special privileges.

20th. The accompanying is a statement framed from an actual survey and estimate of Wells, in several villages, shewing the operation of a Well tax levied on these principles, and also a translation of the detailed estimate of one Well.

(Signed) R. K. Pringle.

Mr. Dunlop, the Revenue Commissioner, replied to the reference of the 14th of May 1831, in a letter dated the 30th of June 1831, in the following terms.

It is undoubtedly most desirable to encourage the sinking of Wells, as much as possible for the reason urged by Mr. Giberne, and because they form a resource for the people in seasons of failure of rain, which appear to be of such frequent occurrence in the Deccan, as to form a most serious obstacle to the prosperity of the country.

On turning to the statement which accompanied Mr. Giberne's letter, it appears, that the total amount of Well Tax, over the whole Collectorate, supposing all the Well to be actually in use, is calculated to yield Rupees 13,483; and that in last season it only yielded Rupees 6,407, and part of this sum even is dependant on some of the Wells having been worked by others than the proprietors, but for which nothing would be payable from them.

I perceive also, on referring to the 1st and 2nd columns, that not quite one third of the number of Wells on which the Tax is leviable, were actually in use, which seems a clear proof, that the advantage from using Wells must be extremely small indeed, and tho' the Veehur Hoonda professes to be a Tax imposed only after a good mercantile profit has been realized on the original expense of sinking and preparing the Well, still this practical example seems to shew, that notwithstanding our calculations, if under our present system it is not worth the peoples while to use ready made Wells; still less can it afford a sufficient prospect of advantage to induce them to incur the expense of sinking new ones. I would therefore recommend, that Mr. Giberne's recommendation should be complied with, as the amount is inconsiderable, and it would at least remove the positive discouragement.

On the receipt of the preceding letter, the Collectors of Poona, Ahmednuggur, Candeish, and Dharwar, were called upon, on the 28th of July 1831, to report to Government (the three former, through the Revenue Commissioner, and the latter direct) the systems obtaining in their several Collectorates, respecting the Assessment of land irrigated by Wells, and what alterations in it they would recommend. The Collector of Poona, in particular, was called upon to state, what Assessment had been imposed upon irrigated land, over and above the Veer Hoonda tax, and what proportion, without reference to that Tax, the Assessment bore to the Assessment on dry land; he was also required to explain, to what cause, was to be ascribed, the fact of two thirds of the number of Wells in his Collectorate being out of use, as shewn in the preceding statement. The Revenue Commissioner was at the same time requested, in forwarding the Collectors reports, to submit to Government, his own remarks on the question generally. And on

the 16th of July 1832, the Revenue Commissioner and the Principal Collector of Dharwar, were furnished, with reference to the abovementioned calls, with the following extracts (paras : 11, and 42) from a letter from the Hon'ble the Court of Directors, dated the 15th of June 1831, for any observations they might have to offer.

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11. In Candeish, in cases in which the land is irrigatedby dams and water courses, made and maintained at the expense of Government, the land, you say, is assessed according to the species of crop; that Government should receive from the land thus irrigated, compensation for the expense incurred, is requisite, but we doubt exceedingly, whether this is the proper mode of taking it, and we desire, that the subject may be carefully investigated.

42. The principle by which you should be guided in assessing lands irrigated by Wells, is sufficiently obvious, though frequent modification may be requisite in applying it to practice. Whereever a new Well is constructed at the expense of the party, it is clear that he ought to be secured against additional Assessment for such a number of years as may afford ample compensation for the expense of the Well. *There is no reason however, why such* expenditure should establish a right to a permanent limitation of the revenue below the productive powers of the soil. Where land, which is irrigated by Wells already made, is to be assessed, there is no reason why it should not like other land, be rated according to its actual powers of production. Where a new Well, or reparation of an old one, is made at the expense of Government, on land under an existing settlement, a reasonable return from the outlay should be obtained.

Mr. Anderson, the Acting Principal Collector of Dharwar, replied to the abovementioned reference, in a letter dated the 7th of September 1832, as follows.

I beg to transmit reports from the Sub Collectors of Bagulkote, and Hooblee, on the subject.

The quantity of land irrigated by Wells alone, in this Collectorate is comparatively trifling, it is only 6354 acres, yielding revenue of Rupees 30,878.

The assessment is fixed, and has been preserved, as we found it. Though from inability of payment, it constantly occurs, that considerable remissions are granted. This inability arises, as well from the altered value of produce, as from the occurrence of seasons of scarcity of water. In the last two years this scarcity has been great, and has been attended with fatal effects; especial-

ly in the plantations of the Sooparee and Cocoanut, many of which in the Southern Districts of the Collectorate have been nearly destroyed.

In making new Wells, the system is to grant leases for a certain term of years, receiving for those years the usual dry land assessment. Afterwards on the expiration of the Cowle, the land is assessed at the rate of other irrigated land of the same description, and is then fixed, though in some instances in the Chickoree Talook an increased assessment is levied on Sugar Cane.

A scale was established by which according to the expense incurred in building or repairing a Well, land was given for a certain number of years on the dry land Assessment; for instance, if Rupees 350 were expended, the land was granted at such rate for seven years, and so on. In cases where a considerable outlay was made, part of the land was given in free Enam.

It appears however, that but little advantage has been taken of these terms, owing equally perhaps to a want of capital, as to a conception, that such speculations are not in these times generally profitable.

More favorable terms might induce greater speculation; especially where there are capitalists: but still, any general system of this kind, might tend to the abandonment of lands already so cultivated, from the lowered value of produce, and the desire to take the more favorable Cowls, such a result however must be viewed as remote.

Other irrigation is described by Mr. Elliot, in all the assessment is fixed; its rate so fixed, depending upon the supply of water, as it may be partial or continued, and also with respect to other circumstances, generally regulating assessment, such as, quality of land, nearness of market, village, &c.

The following is a copy of the letter from Mr. W. Simson, the Sub Collector of Bagulkote, dated the 7th of September 1832, which accompanied the foregoing letter from Mr. Anderson.

The quantity of wet cultivation throughout the six Talooks composing the Sub Collectorate of Bagulkote is very small; under 4000 acres, from Wells, Tanks, Rivers and every other source of irrigation, and the amount of revenue is only 6,000 Rupees, nor is even this sum realized in dry seasons, for consideration is always extended to bad crops, and the Jummabundy is fixed with reference to the actual produce of the year.

In order to encourage Well cultivation; Mr. Thackeray, in 1822, published circulars, offering to all persons who would lay out from 150 to 750 Rupees on a Well or Tank, exemption from increased rate on the dry lands they might convert into Bagayet, by

such means, for a proportional term varying from five to eleven years. A sum of money between 750 and 1500 Rupees expended on a Well or Tank, was to be rewarded by a grant of one *fourth* of the land irrigated under it; and for an outlay of 1500 to 3000 Rupees one third of the land attached, was to be made over in permanent Enam. These terms do not seem to have had the effect anticipated, no one has claimed the remuneration proposed; and few new Wells have been sunk.

In 1828 when Mr. Stevenson made the Tunam or fixed Assessment of the whole Badamee Talook, and of some villages in Bagulkote, he gave the Ryots to understand, that the rate of their fields once fixed, they might make what improvement they pleased, by Wells or other modes, without fear of any additional assessment in consequence. This assurance, which was according to a principle observed in Sir J. Munro's fixed Assessments, does not seem to have had much operation in Badamee; but it led to the construction of seven Wells in Bagulkote, at an expense of 3000 Rupees, nor can it be doubted, that many more Wells would be made, were the assurance frequently repeated, and relied on.

In these arid districts, of which I am speaking, Bagulkote, Badamee, most of Pursghur, and Hoongoond, Government would lose nothing by allowing Wells, to be created free of liability to increased rate on the lands to be irrigated by them: and an inestimable benefit would result to the neighbouring people, in a more abundant supply of water, where it is now too often lamentably deficient. It is by no means rare to see the inhabitants and cattle of a whole village compelled, for months in the year, to travel several miles and back, for their daily supply of water, obtained with difficulty from holes scooped in the dry bed of some nullah.

Upon the whole, wet cultivation has declined since our occupation of the country; it is more expensive and troublesome than the management of dry land; and there is no longer the market for produce formerly afforded by the numerous Horse and Sebundies maintained every where by the late Government, prices of course have fallen greatly. But the fall of prices is now a very trite subject, and the policy that converts the sword into the ploughshare, and turns consumers into producers of food, though it will have credit for humanity, must look for diminished revenues from lands already taxed to the utmost. Indigent cultivators care little for garden products: and of the present population, it is probable, more than half is agricultural.

In many parts of the country, particularly the Indee Talook, are to be found numerous old Wells, disused and delapidated, which might be repaired at small cost, but the owners (who are short-sighted to their own interest) see no hope of profit from capital expended on them; nor with regard to the revenue, does it seem advisable to make advances, on this account. The seven new Wells

above noticed, have only 26 acres under irrigation attached, rated at 34 Rupees a year: and it is calculated that if Government were to build Wells at its own cost, the average rent obtainable from cultivators, would not exceed 5 per-cent per annum on the outlay.

The view in which Government is chiefly called on to consider, the immediate repair and construction of Wells in these districts, appears to be that, where on it has already sanctioned large sums, and obtained thereby the gratitude of thousands, the providing thereby, a supply of water for drinking, and other necessary purposes of life where nature has been niggardly of this essential element to the Ryots.

The following is a copy of the the letter from Mr. Walter Elliott, the Sub Collector of Hoobly, dated the 23rd of August 1832, which accompanied the foregoing letter from Mr. Anderson.

From the nature of the observations in para: 11, of a letter from the Hon'ble Court of Directors, enclosed in yours, it would appear, that the information required, is not confined to land irrigated by means of Wells alone.

That of the latter description constitutes but a small portion of the irrigated lands in this sub-division, a far greater quantity receives the benefit of Wells and Tanks conjointly, and a considerable extent is supplied by canals, or cuts from Rivers and Nullas. A fourth description of cultivation under the name of " dry garden land" is only partfally watered from Wells or Streams; but in all these the Assessment is of fixed amount, and does not fluctuate with the nature of the corp. The same rule is observed for every kind of land, whether wet or dry, each field having an ancient fixed rent, which is either very high (Chalee) or very low (Kuttgootga) and each tenant holds a portion of both descriptions, the aggregate of which forms an average fair rent. These rates cannot be altered without a complete change in the whole system of assessment.

The usual classification of land of every description, is made under three heads, dry, wet, and garden, of which the two latter are either wholly, or in part, watered by artificial means. Each of these, is subject to a different rate of Assessment. When, from whatever circumstances dry land becomes wet, or wet becomes garden, a corresponding increase is made in the Government demand, and vice versa, but the tenant is allowed to raise whatever produce he choses in each particular class, and no alteration is made in his rent for the exercise of such description. This approaches nearly to the system approved by the Hon'ble Court.

Wet land may be subdivided under three heads. That watered by rain alone, producing rice, the fixed rates of which vary from 1 to 3 Rupees per acre; similar land with the addition of a small re-

servoir or embanked pond above it, paying from 3 to 6 Rupees; and rice land under large tanks, the best portion of which are reserved for the culture of sugar cane. The small reservoirs are always constructed by the Ryot, in the first instance, on a Cowle, confirming to him the old rates of payment for 3, 4, or 5 years, at the discretion of the Collector, after which he is liable to the increased Assessment, consequent on the more certain and uniform supply of water obtained. When repairs are needed, the Ryot, in like manner, receives a suitable remission at the Jummabundy, which is sometimes repeated the following year.

Large Tanks affording a still more copious and certain supply of water, the land becomes proportionably more valuable, and yields from 4 to 12 Rupees per acre, when cultivated with rice, and from 6 to 15 when its produce is sugar cane. The fixed nature of the Assessment is exemplified in its application to the last mentioned kind of land. The exhausting nature of the cane renders an alternation of crop necessary from cane to rice, yet the rent is always the same. It is even customary, paticularly in Hangul Talook, to leave such fields fallow every second year, and then too, the rent is paid. The demand in the latter case used to be for the whole rent, but as this was proved to be an innovation during years of exaction, under the late Government, the old and admitted practice has been resumed, of taking only the Einatee and remitting the Puttee portion of the Assessment on such fallows.

Tanks of this description and water-courses filled by dams, are always repaired by Government alone, the Ryots contributing in no degree, but the increased Assessment derivable from such improvements, may be considered as more than repaying the interest of the money laid out.

The Ryot is moreover obliged to contribute a certain amount of labor every hot weather, to cut away the grass and deepen the beds of such Tanks and water-courses, and otherwise to keep them in repair, a custom which, under the present Government, has been too much neglected.

Garden land can only be supported by the help of the largest and finest Tanks, or by perennial water courses. The rate of Assessment varies from 8 to 20 Rupees per acre when sugar cane and betle are cultivated, and from 10 to 70 on more permanent produce, as cocoa and areca-nuts and fruit trees. But, as many of the Tanks under which the last description of cultivation is situated, are apt to become exhausted in a dry season, recourse is likewise had to Wells. The latter are always constructed and kept up by the cultivator, but the Government is expected to incur every expenditure on account of the Tank. The large *volume* of water which flows every monsoon from the higher ground bringing along with it sand, mud, &ca. has a tendency to fill up the larger Tanks, a result which has actually taken place in many, so that the valuable gar-

den, land is now cultivated with dry crops, and the process is in progress in many others, which must naturally share the same fate, unless some plan can be devised for ensuring a regular supply of water.

In such cases the labor of deepening and repairing the Wells, fall so heavily on the Ryot, that larger remissions become necessary, and in several places in the Hangul and Kode Talooks permanent reductions in the Assessment have been made, and further abatements are still required.

The only instances of lands irrigated by means of Wells alone are in those places where Tanks formerly existed, and in such cases the Assessment has always fallen considerably below its former standard. In the hot months the supply of water is insufficient, and the water is exhausted after being drawn for several hours consecutively. The only Wells with perennial springs, that I recollect to have seen, are at Munolee, in the Bagulkote subdivision.

It only remains to notice the last kind of irrigated land designated above, as "Dry-garden." In these are cultivated the different kinds of Vegetables, Tobacco, Maize, and sometimes a little Sugar Cane. The water is raised from Wells, and sometimes from Nullas, but as the supply is precarious and variable, it often happens, that part of the ground only is cultivated as Garden, while dry grains are raised in the remainder. In the latter case a corresponding allowance is made and the dry rate of Assessment only is levied. As this amount varies from year to year, it is settled at each Jummabundy. The dry garden rates are from 3 to 10 Rupees per acre.

On the 15th of October 1832, Mr. Williamson, the Revenue Commissioner, replied to the foregoing letter as follows.

With reference to Mr. Chief Secretary Norris's letter of the 28th of July 1831, I do myself the honor of forwarding, to be laid before the Right Honble the Governor in Council, the accompanying copies of the reports * made to this Department agreeably to the instructions of Government, by the Collectors of Poona, Ahmednuggur, and Candeish, describing the system which obtains in their Collectorates, respecting the Assessment of lands irrigated from Wells, and in obedience to the instructions conveyed to my Predecessor, in the 2nd paragraph of that communication, I beg to offer the following remarks, and suggestions which have occurred to me, on an attentive consideration of the subject to which those reports relate.

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* Report from Mr. Marriot, Acting First Assistant Collector of Poona, dated 2nd. February 1832.
Ditto from Principal Collector of Ahmednuggur, dated 14th October 1831.
Ditto from ditto dated 28th January 1832.
Ditto from Acting Collector of Ahmednuggur, dated 26th June 1832.
Ditto from the Collector of Candeish, dated 31st March 1832.

2nd. In the Poona District, which I shall notice first, as the question under review refers to it, more particularly (having originated, in a recommendation offered by the Junior Principal Collector, for the abolition of the Veer Hoonda or Well tax, altogether in his Districts) the Assessment on artificial irrigation consists of a tax imposed directly on the Wells, whereas in the Candeish, and Ahmednuggur Districts, it is found in the shape of an enhanced rate on the watered land.

3rd. The order of Government to the Collector of Poona, dated the 12th October 1826, under which the tax was introduced, and the rule passed by the Right Hon'ble the Governor in Council, for the regulating of the tax which accompanied that order, had for their object the encouragement of Weil cultivation on equal and uniform principles, and appear to have been the result of mature deliberation. The operation of those rules however, His Lordship in Council will perceive, from the letter addressed by the Collector of Poona, to Mr. Chief Secretary Norris, on the 9th August 1831, and his report to this Department, dated the 24th of March last, has not been attended with the desired, or expected effects. On the contrary, the cultivation of wet or Bhagayet lands, has diminished, and Wells which had been previously in use, have been abandoned to an extent which renders irresistible, the inference, that the principle on which the tax is founded, and the rules by which the amount has been determined, are practically inapplicable to the peculiar circumstances of this Zillah.

4th. It cannot be denied, that to assess Bagayet lands, which produce more valuable crops than Zerayet, or dry lands, and yield a larger profit to the cultivator, is correct in principle, and conformable to the usage of most parts of India, but it is requisite, that the enhanced rate should not only be defined and certain, but also in just proportion to the increased productiveness of the land. The Veer Hoonda in the Poona Zillah possesses the former quality, but I am induced to think, from the reports of the Collector and the Assistant, whose reports he has handed up, as well as from the enquiries I have made, that it is both burthensome, and unequal, and operates as a check upon improvements in a country in which owing to the uncertainty of the seasons, the poverty of the Ryots in general, and the absence of energy, capital and enterprize, the sinking of Wells should receive every encouragement, which can be bestowed on such undertakings, not less for the prevention of distress, from the want of water in unfavorable seasons, which are of such frequent occurrence here, than for the extension of cultivation of superior products, for which, though the climate and the soil are congenial, the means and facilities exist, as yet, but in a partial degree.

5th. The tax being imposed on the Wells (the land irrigated from it being assessed at the Zerayet, or dry land rate) the amount

falls heavy on the Ryot whenever there is not a sufficiency of water for the whole extent of ground, which it was estimated at the time the tax was calculated, and fixed, to be capable of irrigating, or whenever he may be unable to bring the whole of it under tillage. The watering the smallest portion of the land renders the Ryot liable for the whole amount of the Veer Hoonda.

6th. Another objection is urged in these proceedings, which appears to me to be well founded. It is the inequality arising from a Well built in an economical manner, by a poor Ryot, being subject to Assessment, after a few years exemption, which, according to the rules of 12th October 1826, would be sufficient to reimburse him for his outlay, while another Well of equal capacity, but expensively constructed, is exempted in perpetuity, because of the larger expenditure of capital. It is likewise said, that an encouragement to fraud is held out in the exemption allowed to actual Proprietors, Mortgagers, &ca. which may have the effect of causing the Wells to be continued in the names of persons who are neither one, nor the other.

7th. If it be admissible to judge of the tax by its effects, it becomes unnecessary to dwell on its excessiveness, when the abandonment of two thirds of the number of Wells in the district is ascribed chiefly (see 4th para: of Mr. Giberne's letter of the 9th August 1831) to the operation of the tax, and other striking circumstances noticed by the Collector and his Assistant, lead to the conclusion, that it is burthensome. If we see Ryots abandoning Wells, which for years have been the pride of themselves and families on account of Veer Hoonda, is it not proved to be a tax so grievous as to be decreased, if not relinquished. " Mr. Giberne strongly recommends the abolition of the tax " I should almost" he observes " recommend a reduction in the rents of dry lands when turned into garden lands, sooner than adding by a tax, a check to its extension".

8th. For the reasons above stated, I agree with Mr. Giberne, and concur in the recommendation offered by my predecessor, in his letter to Mr. Chief Secretary Norris, dated the 30th of June 1831, that the tax on Wells should be abolished throughout the Poona Zillah, exclusive of Sholapoor, the Veer Hoonda yielded in 1829 | 30 Rupees (6310) six thousand three hundred and ten, and in 1830 | 31 Rupees (6431) six thousand four hundred and thirty one, and I apprehend the Revenue is more likely to fall off than improve. I have not yet been able to ascertain exactly the amount realized under the old system of taxing land irrigated from Wells (Bagayet Mothustul) but if it was reverted to, I am inclined to think, there would not, in the present state of the country, be realized from it, in the Poona District (Sholapoor excepted) more than Rupees (10,000) ten thousand. If Government considered it desirable to substitute for the Veer Hoonda, an increased assessment on lands actually irrigated and used for the produc-

tion of Bagayet crops, a small general augmentation, say about one third or one fourth of the Zerayet rates might be imposed on them. This would approximate the principle of assessing lands according to their productiveness, without placing that direct check upon industry created by the Veer Hoonda. It would tend too, to ensure simplicity, and to check the opportunities for fraud, which would be open to the native district officers where the fixing enhanced rate left to their agency or discretion. I would however, under any circumstances, exempt from taxation, in any shape whatever, those districts which chiefly suffer (and most severe sufferers they are) from a want of rain, Indapoor, Soopa Turuf, and some parts of the Poorundhur and Bhumthurry Purgunnahs, and a few other places, would come within the exempted mark, but the line might be drawn with more precision hereafter.

9th. The importance of the question, and the diffidence I feel in offering a decided opinion upon it, make me anxious to submit to the consideration of His Lordship in Council, the different views which may be taken of it. I myself, as above stated, certainly think, that no extra assessment whatever shall be levied in *this* district, on crops irrigated from Wells, and I am strengthened in that opinion by finding, that it is entertained by my predecessors and the officers employed in the Zillah, whose reports are referred to.

10th. Among the advantages which I am led to anticipate, from the abolition of the tax, is the improvement of the Ryots circumstances, which may be looked for from the greater value of the crops, which that measure will have a direct tendency to encourage them to raise, and from the diminution of the chances of failure, when they are rendered more independent of the seasons, is one that promises to be equally beneficial to the public revenue, in rendering unnecessary to a certain degree, the granting of general remissions, which is one of the evil of the present system necessary, it is true, from the extreme poverty of the Ryots, but not the less desirable on that account, to be checked as much as possible. In his letter, to the Collector, dated the 25th February 1831, Sir R. K. Arbuthnot observes. " In granting the total remission of the Well tax, my opinion also is, that the Government Revenue will not suffer by the measure, as the proprietors of Wells being generally substantial Farmers, are enabled to carry on at the same time a considerable extent of dry land cultivation, from which tax is derived, and which, if the Well assessment is enforced, they will be obliged to throw up".

11th. In the Ahmednuggur Zillah, the Hon'ble the Governor in Council will observe, from Mr. Acting Collector Townsend's report of the 20th of June last, that wet land is subject to a considerably higher rate of Assessment than dry land, and that in the opinion of that officer, there is little reason to expect an extension of Bagayet cultivation from a substitution of the inferior for the

superior rates, owing to the want of a market for, and the consequent low prices of agricultural produce. Notwithstanding this, however, he considering the higher taxation on irrigated lands improper in principle, in reference to the state of the country and circumstances of the people, conceives it expedient to make the experiment of reducing the rates, which are represented as high, to an amount equal to one third, or one fourth more than the Assessment of dry land.

12th. Mr. Townsend's plan has consistency and uniformity to recommend it, but it would create a great change in the existing system of assessing Bagayet lands, which is now a principle source of Revenue in the Ahmednuggur Zillah. It is estimated at Rupees (2,31,603) Two lacs, thirty-one thousand, six hundred and three, per annum, but in this amount I conclude the rent derived from Páthusthul Bagayet, or land irrigated from Water courses, Tanks &c. is included. If Government was prepared to remit so large a sum as the proposed abatement would render necessary, I do not think it would be advisable to do so, till we had fuller information respecting the actual operation of the present system. It is regulated on a grand principle of the Mahratta Government; the people are accustomed to it, and I cannot help thinking it would be unsafe to depart from it till we had better knowledge of its defects or advantages. When I have personally examined the system of village management pursued in the Zillah, I shall be able to speak with more certainty on this subject, but I have no doubt myself that the Villages which pay high Bagayet rates possess some local advantage which influenced the fixers of these rates, which to us (too often ignorant of every thing that does not appear on the surface) are unknown. The Acting Collector has not stated in what districts high rates check Bagayet cultivation, or where natural obstacles interpose; in the latter, reduced rates would probably merely reduce revenue.'

13th. All that I would recommend to be done at present, would be, to reduce the Bagayet rates in villages where, after full enquiry they were found to be excessive. The enquiry should be instituted in each village separately, and the reduction fixed in reference to local circumstances. It may often happen, that two or three different rates exist in the same villages, and so they should continue to exist when the desparity was sustained by natural peculiarities, or other substantial reasons.

14th. In those villages, where Wells had fallen into disuse, or Bagayet land had been thrown up, owing to the heavy Assessment, the people should be encouraged to repair the Wells and irrigate the land by a reduction of the Assessment; an abatement equal to ¼ of the old rates would probably, in most instances, be sufficient.

15th. 'In the 2nd para: of Major Robertson's letter to my predecessor dated the 28th January last, that Officer expresses him-

self strongly against taxing the holders of Meeras estates beyond the Zerayet rates, on account of land irrigated from newly constructed Wells. It seems to have been that officer's intention, at some future period, to have explained the grounds of his opinion, but having left the district immediately after he recorded it, he has not yet had an opportunity of doing so.

16th. Government may perhaps desire to posses fuller information before it decides on Major Robertson's plan, but adverting to the benefit, the construction of Wells would confer on the country, the security they would tend to give to the revenue, the weight due to the judgment of so experienced an officer, and the consideration that the measure would not affect the "Mothustul" and "Pothustul" land now paying Bagayet rates (the exemption being confined to new Wells sunk in Zerayet lands) I confess, I am led to view the question in the same light as Major Robertson has done.

17th. He speaks of his plan, as if he would confine it to Meerass estates, which comprise a great portion of the lands in the Ahmednuggur Collectorate. It strikes me however, that the exemption might be beneficially extended to all Zerayet lands. I see few advantages it would confer in the one case, that would not under judicious settlements attend it in the other. The enhanced value of untaxed Wells would give to the soils they watered, would tend to resettle Merasdars on the patrimonial fields they had deserted and by attaching Ooprie Ryots to particular lands, give encouragement to their permanent occupation, which is always the first step to effectual improvement.

18th. It may be thought, there is a difference in the principles on which I have discussed this important question, as it relates to Poona, and Ahmednuggur. I acknowledge a difference is perceptible, but to this question, as to most others, connected with the agricultural economy of this country, I would not, but on the strongest grounds, apply rules, which however just they may be in the theory, were practically opposed to usages well understood, or customs that have been long established.

19th. Under these impressions, I have revived the question before me: at Poona I have recommended the repeal of a tax trifling in amount, of recent origin, obviously unfitted to the nature of the country, and found by experience to be of a pernicious tendency: in Nuggur again I would modify but not change the system, because Well irrigation is conducted in the Zillah on a very extensive scale, a large portion of the revenue depends on it, the system is analogous to that which exists throughout India, it is well understood, easy of improvement, and not marked by those glaring defects attributed to the "Veer Hoonda" or Well tax of Poona. It is to be particularly remarked too, that a large protion of the land watered from Wells in the Poona districts, have never paid any Assessment beyond the Zerayet rates, till the "Veer Hoonda" was

established; the alteration that is proposed, is therefore so far conformable to a custom that exists.

20th. In Candeish, a very injudicious system prevails, according to which, land that has been once watered from Wells is assessed ever afterwards at half the amount imposed on the wet land, although it may not be brought under irrigation again when the full rate is levied. As the "Korud Dhur," or half of the wet land Assessment, is considerably more than the dry land, or Zerayet rates, it must naturally have the effect, as the Collector justly observes in the 8th para: of his report, dated the 31st March last, of deterring persons, from irrigating lands, which though they may be cultivated with the dry crops afterwards, would nevertheless be subject to a perpetual additional tax.

21st. The fact noticed by the Collector, in the 13th para: that the number of Wells fit to be, but not used, is twice as that of those in use, affords grounds for hopes, that a reduction in the assessment of irrigated lands would be attended with very beneficial consequences.

22nd. The measure by which Mr. Boyd would remedy the evils of the present system (which it is to be observed, is one of our own creation) is at once simple and decisive.—He proposes to equalize the rates of dry and Well watered lands.—All lands capable of being so irrigated being uniformly taxed at the Korud, or half Mothustul rate.

23rd. Though it is evident, this plan possesses many advantages, the Collector calculates, it will be attended with an immediate reduction of the rents, of Rupees (43,800) Forty three thousand and eight hundred, and I entertain doubts on certain points, on which I would wish my mind satisfied before I could feel myself justified in recommending the relinquishment of so large a revenue. In a matter of such vast importance no step should be hastily taken.—Our most decisive measure are often signal of failures.

24th. I should wish to know, in the first place, whether the "Korud" rate levied on dry lands is, in reference to the quality of those lands, a really higher Assessment than that on the common Zerayet lands of Candeish; in the second place, what difference exists between the old rates levied on those lands when they were not watered, and the present "Korud Dhur"; and in the third, whether there are not local or natural peculiarities which would render the same rate inapplicable to different places. Thus in some villages, from the superior value of the land (owing to its paucity, peculiar fertility &c.) a higher rate might be fairly demanded than in other place. Sometimes, too, it might be desirable to modify without abolishing, the present system, as when by a reduction in both the "Korud" and full Mothustul rates, an existing inequality might be equitably adjusted,

25th. These are points on which I shall request the Collector to give me full information, and when I am enabled to lay it before the Right Hon'ble the Governor in Council, I hope to submit, for his consideration, some final plan for promoting Well irrigation in Candeish.

26th. The only District which remains to be reported upon, is the Sub Collectorate of Sholapoor, the circumstances of which (particularly the Barsee Talooka) as regards the Well tax, differ in some points from those of the Poona Division, and as I am on the eve of visiting it, I shall defer my report, till I have conferred on the subject, with the Sub Collector.

The following are the enclosures to the foregoing letter.

Letter from Mr. Mallet, Acting First Assistant Collector of Poona, dated the 2nd of February 1832.

I beg to lay before you the remarks and conclusions on the Veer Hoonda, (or Well tax, in addition to the ordinary land tax) which have occurred to me in course of the Jummabundy of the Pabhul and Junere districts, in order that if you think proper, they may be forwarded to the Revenue Commissioner.

The following is a statement of the Veer Hoonda.

	Junere.	Pabhul.
Fuslee 1240	Rs. 962..	..Rs.1085.
Ditto..1241..	..774..	.. .. 246.
Decrease..	....188....	.... 839.

The decrease in Junere arises from Wells being abandoned; of that in Pabhul, about 400 Rupees arises from all mortgages being assessed last year, whereas this year, by an order of Sir R. Arbuthnot, only those of within 30 years standing have been so, others being classed with owners, getting exemption by the survey papers; the remainder 439 Rupees arises from the abandonment of Wells, of which 213 Rupees are from one Well, whose Meerasdars being too poor to undertake it, was used by a "Deegar Meerasdar" who last year refusing to pay the Veer Hoonda, the crops were attached and 19 Rupees of the 213 came to Government.

I believe the Veer Hoonda was fixed on a strict calculation of the cost and irrigable powers of Wells, to be exacted or suspended, or altogether with-held, accordingly. It might happen, that a poor Ryut, with the earnings of many years labour, had obtained the height of his ambition, a Well and 2 or 3 acres of "Bhagayet," but his Well being sunk of the cheapest materials, its calcu-

lated cost is low, and he is assessed for Veer Hoonda, another rich Ryut, perhaps a Sahookar, who has amassed wealth by usury, on the villagers, had sunk his Well with the very best masonry, at great expense, according to his habits of luxury, and the cost being highly estimated, he is exempted. The system of the English window tax was the reverse of these, and was founded on the true maxim, that the subject should contribute according to his means, to the wants of the state. If it be decreed, that something extra must be paid for the fertile spot, I would say, let the burthen fall more lightly and equally in the shape of moderate or increased Mothustul, or Zerayet rates.

Considering the small proceeds of this tax to Government, small in the aggregate, but individually large (for many are the fortunate Wells) would not the sacrifice be compensated for, in the happiness shed thereby. *The present sufferer* no longer forced, as it were to spread the water over the whole space, that may have been reckoned irrigable in the survey papers; the temporarily exempted, no longer kept in terror of the Veer Hoonda falling upon him; the permanently so, no longer forestalling the others in the market; the enterprising and active Coomby no longer prohibited, (for so almost at least he is) from possessing himself of a Well to the vital comfort and happiness, not only of himself, but many others in the village; by the knowledge that the moment his work begins, information must be given to the Mamlutdar, that on its completion, the rate of the Veer Hoonda assessment may be fixed.

By such a sacrifice, Well irrigation increasing, land would be turned into verdant tracts, ensuring crops, in even seasons of drought, which crops, not requiring remissions, would repay in course of time, at least part of the sum now yielded. The measure may be objected to, on the score, that it might enable the possessors of land watered by Wells, to undersell those holding watercourses, but I see no fear of that, taking into consideration the expenses of making and repairing Wells, and of extra bullocks, ropes, buckets, &c. &c.

If we see Ryuts abandoning Wells, which for years have been the pride of themselves and families, on account of the Veer Hoonda, is it not proved to be a tax so grievous as to be decreased, if not relinquished, on any Well being left by its owner, the Veer Hoonda, which would be demanded from another taking it up, if not equal to a prohibition to its use, is certainly most likely to cause the same effect.

The rule that the bonâ fide owner of an assessed Well, can only be exempted from the tax, is an encouragement to the fraud, of his name being recorded, instead of the persons in whose hands it is, though from poverty, or other causes, for years he has been unable to use the Well, and given it up to another, the villagers would no doubt class him as a "Sarkah" or sharer, and thus have

an excuse for recording him as owner: again, if mortgagees under 30 years, are not classed with owners, and therefore are assessible, there would not be much scruple in giving them credit for that period.

In short, I arrived at the conclusion, that the Veer Hoonda is a tax on industry, checking its natural deserts, and therefore, damping the energies of the Ryuts, the removal of which would be attended with the greatest benefit, but the contrary, with the loss, both to Government and to the Ryuts, and beg to suggest, that if the amount cannot be relinquished, it should be levied in some more tolerable way.

Should, what I have above written, be deemed worthy of consideration, pending the decision, I beg your immediate sanction for suspending of the Veer Hoonda throughout the districts under me, and for allowing all mortgagees the same privileges, as real owners.

I need not tell you of the loud complaints which were made to me against the Veer Hoonda, the assessed finally affirming, that if it was continued, they must throw up their Wells, sufficient rain having fallen to raise their springs. I could not give remissions for loss of water in Wells, however anxious I might have been to lighten the burthen of the tax, which being equally heavy to all, should I think, if reduced in one case, be so in the others, and this general reduction, I did not feel myself authorized to make.

Letter from Major Robertson, the Principal Collector of Ahmednuggur, dated the 14th October 1831.

In compliance with the order conveyed to me, in a letter from Mr. Bax, dated the 28th July last, I beg leave to lay before you the following information.

A Well, which can supply water plentifully, for one mote or bag, will irrigate five Beegas, but not, if the whole land is laid out in sugar cane, but only one half of sugar, and the other half of grain, &c. or if one half of 5 Beegas are not laid out in canes, then the Well would water six Beegas of other products; so in the same proportion, if the Well has two motes, or three motes; but beyond the proportion stated, nothing. The proportion also bears reference downwards, under the supply, adequate to keep one mote constantly employed. Some Wells only give water sufficient for irrigating two, some for three Beegas, and so on. The Beegah of garden products is sometimes considered to consist of 20 Pands of 20 Kathees, of 5 Haths and 5 Moothees each, but in this district the length of it is not uniform. In Nassick &c. the following standard is found.

18	Tassos,	1	Guz.
3	Guz,	1	Kathee.
20	Kathees,	1	Pand.
20	Pands,	1	Beegah.

In the Nuggur Pranta, a Beegah is roughly marked off by 100 Haths square. This Beegah is equal to one produced by a Kathee of five Haths; and in some places a Kathee of 4½ Haths is usual. In some few villages there are only 15 Pands in a Bagayet Beega.

The Assessment on Well irrigated land, was sometimes on the Beegah, and sometimes on the crop. Where the latter was customary, Captain Pottinger changed it for a Beegottee Assessment. The rates now are from ¼ Rupee up to 5 Rupees per Beegah. In the town of Bahla, if cane is grown, 5 Rupees is paid, if grain 2½ Rupees per Beegah.

With respect to the propriety of any alteration in the system I have described, I shall have the honor, within the course of two or three months, to submit any observations that occur to me. I am desirous of enquiring, from different cultivators, in several parts of the districts, into certain details, before I state my sentiments.

Extract of a Letter from Major Robertson, the Principal Collector of Ahmednuggŭr, dated the 28th of January 1832.

Government, in a late letter, expressed its wish to extend cultivation by irrigation, and to give encouragement by decreased Assessment to it. This course is, in my judgment, a most salutary one, both for the people and Government, and, acting up to it, in the fullest latitude, I have encouraged individuals to dig good Wells in their Meeras estates, assuring them, that they will not be taxed beyond the Zerayet rate for their lands. At first view, yourself, or Government, might suppose this was too great an abandonment of the tax on Bhagayet land; but I solicit the favor of a deliberate attention to what I can advance on the subject, before such an impression is allowed to counteract the progress of what I had begun. I had it in contemplation to submit all my observations in my next Jummalŭndy report, and will do so immediately after my return to my duty.

Letter from Mr. E. H Townsend, Acting Collector of Ahmednuggur, dated 26th of June 1832.

I have now the honor, in reply to Mr. Reid's letter, of the 31st March, to forward a statement, shewing the amount of Revenue which would be sacrificed by reducing the rates on Bhagayet land, now in cultivation, to the highest and lowest rate of Zerayet in each Purgunnah.

This statement shews the highest and lowest rates levied on Bagayet land in each Purgunnah, together with the highest rate of Zerayet, as, I presume, that in case of the proposed reduction, that would be the rate levied on Bhagayet land.

By this statement it will appear, that, in addition to the expense of digging a Well, the tax upon improvement, in the shape of an increased Assessment, is a hindrance to the laying out of capital on the land, and it is almost unnecessary to add, that all such checks in a country, where, from a want of water-carriage, the market is very limited, are wrong.

I should however consider it very doubtful, whether the abandonment by Government of the whole of their present revenue on garden land would promote superior cultivation, in proportion to the loss that it would occasion to the Revenue. The present low state of agricultural profits seems (besides other causes) to be the consequence of want of capital to enable the cultivators to improve their lands, and want of a more extensive market. The removal of the check to improvement that now exists in the Bagayet rate, would, I should apprehend, be comparatively little felt by the generality of the cultivators. These observations do not apply to those few villages in which the Bhagayet rates are so high as 8, 10, and 11 Rupees per Beega, these however, are exceptions to the general rates, which are 3 and 4 Rupees per Beega.

It might however, be desirable (were Government so disposed) to try the experiment, for a limited number of years, of letting the Bagayet land at a small increase of rate above the Zerayet; say a 3rd or 4th more, which would in most places, considerably lower the present rate, and yet reserve to Government a portion of their present Assessment. In case of the adoption of such a plan, I would beg to recommend the adoption of one rate throughout the Collectorate, say 2 Rupees: this ofcourse would be a far greater benefit to those Mahals where high rates are now paid, than to others, but it would avoid much confusion, and prevent many frauds, that would otherwise, I should fear, be hard to check, were the new rates various, or, if discretionary power on this head, were given to our Talooka establishments. From this rate those few villages in the Koombary Purgunnah, would, ofcourse, be excepted, which now pay but 1½ Rupee per Beega on Bagayet land.

Another measure that I would beg to propose, should the above not meet the approbation of Government, would be to give all diggers of new Wells, the land rent free for a certain number of years, that would be thereby benefitted; this would be an encouragement to this expenditure of capital, from which the Government must eventually be the gainer.

Statement of the Bagayet land in the Ahmednuggur Collectorate, for Fusly 1241, *A. D.* 1831 | 32.

Names of the Mahauls.	Total of Bagayet Land.		Deduct the Bagayet Land left unsown.		Remaining cultivated Land.		Its Details.					Remaining difference of the Bagayet Land Rupees.	Rate of Bagayet. highest	Rate of Bagayet. Lowest.
							Cassbundy.		Cacha Beegah.					
	Beegahs	Rupees.	Beegahs	Rupees.	Beegahs	Rupees.	Coss Beega.	Rs.	Beegahs.	highest rate of the Zerayet,	rupees			
Ahmednuggur.....	10854	44528	2802	11821	8051	32706	,,	,,	8051	1½	12077	20629	7	2
Ankola.....	2451	9560	295	2123	2156	7437	250	2088	1906	1½	2859	2490	6	2
Chandore.	14371	48739	6216	20438	8155	28301	,,	,,	8155	1½	12232	16068	8¼	2
Kurdah.....	4267	13900	1126	4593	3141	9307	,,	,,	3141	1½	4712	4594	6	2
Kurmalla.....	6459	19914	1177	4003	5281	15810	,,	,,	5281	1½	7021	7888	10	2
Koorty	4561	12031	678	2320	3882	9711	,,	,,	3882	1½	4853	4857	5	2
Nassick.....	11012	33564	3154	10888	7858	22675	,,	,,	7858	1½	11787	10887	11	2
Neyewassa.....	11327	28770	3780	11575	7547	17195	,,	,,	7547	1½	11320	5874	3½	1
Patoda	10090	21093	5004	10985	5085	10107	,,	,,	5805	1	5085	5022	5	1
Sungumnair....	2446	8621	724	2698	1722	5923	,,	,,	1722	1½	2584	3339	6	3
Surnur.....	11224	51496	1671	8183	9553	43212	2447	2174	7105	1½	10685	10908	5	2
Wann Dendary.....	14333	38582	3698	9468	10634	29114	,,	,,	10634	1½	15951	13163	5	2

Letter from Mr. Boyd, the Collector of Candeish, dated the 31st of March 1832.

In reply to your letter of the 10th ultimo, I beg to furnish the additional information on the subject of the system in Candeish, regarding land irrigated by Wells.

The rates assessed on land thus irrigated in this Collectorate, are exhibited in the accompanying statement, of the amount of land of this description under cultivation for 1240 Fusly.

In some instances the rates depend upon the crops, but to no great extent in Mathusthul lands.

Lands not watered; tho' capable of being so, are in Candeish termed "Korud" or dry, and taxed at a moiety of the watered rate.

The term Korud Dhur, applying as it now does in Candeish, to a tax levied on land peculiarly situated, and the heaviest rate on dry land, was not known under the former Government; the practice then, was to charge the water rates for as much as was irrigated, and the Zerayet, or dry land rate only, for what was not. I need not add, that the Zerayet rate is much lighter than the Korud, or half Mothusthul Dhur, this tax was imposed by Colonel Briggs, during the first year we possessed the country.

Land once watered, always afterward bears the Korud Dhur, when not irrigated.

You will observe, that the Mothusthul, or Well rates, in Candeish, are higher than in Ahmednuggur or Poona.

The Korud Dhur system is evidently bad, as it discourages irrigation from its entailing on land once watered, a higher rate in perpetuity.

The rates of the Candeish Korud, and Ahmednuggur Mathusthul will not be found to be very unequal.

I have no hesitation in strongly recommending the reduction of all lands capable of irrigation by Wells to the Korud or half Mothusthul rate, we would encourage the use of deserted Wells by lessening the tax, which I am convinced is too high, and remove the drawback to watering "Korud" which at present exists, as the Ryut would find he pays nothing more when increasing his exertion, whereas at present, "Korud" land which might be partially watered, or even sufficiently so, are neglected.

In the accompanying statement, the cultivation of lands under Wells, for Fusly 1240, amounted to 53,472 Beegahs, of this there was actually watered 16,662, and the remainder 36,797 was Korud, or dry land, tho' appertaining to Wells.

The revenue arising from the former amounts to 87,716 Rupees, so that the immediate sacrifice to Government, should my recommendation be sanctioned, would amount to 43,800 Rupees, suppos-

ing the extent of cultivation not to differ from what it was in 1242.

The proportion of Wells in use, to that of those in repair, yet thrown up, is about one half, and there are besides many Wells requiring various degrees of repairs, before they can be worked.

Statement of cultivation of land under Wells, within the Collectorate of Candeish, for Fusly 1240, A. D. 1830 | 31.

Number of Beegahs.			Rate of Beegahs.	Amount of Revenue.			Remarks.
Beegahs.	Pands.						
19	1	1½	15	289	3	50	
57	2	1¼	14¼	820	1	62	
1	3	3½	13½	25	3	93	
8	2	3	13	112	1	81	
54	2	1¾	12½	682	1	37	
15	..	..	12	180	..	..	
40	2	..	11½	465	3	..	
40	..	3¾	11¼	452	..	50	
45	..	2¾	11	501	..	81	
151	..	3½	10	1591	3	..	
20	2	2½	9½	195	3	75	
57	..	1¼	9¼	527	3	31	
15	2	¼	9	140	..	25	
3	3	2	8¾	33	2	75	
185	1	1½	8	682	2	..	
63	..	3½	7½	472	3	25	
12	1	1¼	7¼	89	1	..	
1165	3	¾	7	8160	3	12	
36	..	1¼	6½	234	1	50	
152	3	3¾	6¼	955	3	43	
2786	2	3¾	6	16698	2	31	Land actually irrigated.
38	1	¾	5¾	219	2	37	
8	3	2	5½	49	3	12	
287	2	2½	9½	1582	..	81	
51	..	4¾	5¼	269	..	..	
7646	3	3	5	38233	1	93	
33	3	2¼	4¾	160	3	62	
502	2	3½	4½	2262	..	43	
56	3	3¾	4	6122	..	69	
149	2	¾	3¾	411	1	50	
408	3	2	3½	1438	..	93	
133	3	2½	3¼	444	3	50	
737	2	3	3	2158	3	56	
1	2	1¼	3⅓	4	3	56	
9	3	4½	2¾	27	2	56	
68	2	2¾	2½	171	2	37	
8	1	1¼	2	16	2	60	
12	..	..	1½	18	..	..	
189	1	½	..	566	2	18	
16662	1	2¼	..	87716	..	53	

Number of Beegahs. Beegahs.	Pands.		Rate of Beegahs.	Amount of Revenue.			Remarks.
9	..	..	5	45	..	..	
207	3	½	4	831	..	37	
2	..	..	3¼	7	2	..	
3985	1	3	3¼	13950	.	18	
86	2	¾	3¼	280	2	6	
6	2	2½	3⅜	20	2	81	
3155	1	3½	3	9468	1	143	
265	2	..	2¾	729	2	37	
45	3	..	2⅝	119	3	56	
10675	2	1¾	2½	26690	..	25	
863	..	2	2½	1941	3	75	"Korud" or land under Wells, yet not watered this year.
9396	..	1½	8	18732	3	81	
2165	3	½	1¾	3786	3	12	
4255	2	4½	1½	6383	1	87	
884	..	1¾	1¼	1106	1	75	
14	..	..	1	15	3	..	
72	2	3½	¾	72	1	62	
2	1	..	½	1	..	50	
192	1	..	..	192	1	¼	
36797	2	4½	..	84888	2	1	

Abstract of the above.

	Number of Beegahs. Beegahs.	Pands.	Rate of Beegahs.	Amount of Revenue.		
Land actually irrigated	16662	1	2¾	87716	..	53
Korud, or Land under Well, yet not watered this year	36797	2	4½	84888	2	1
Total	53460	..	1⅞	172604	2	54

The foregoing letter from the Revenue Commissioner, was replied to by Mr. Secretary Reid, on the 20th of November 1832, as follows.

In reply, I am instructed to state, that His Lordship in Council, conceiving it to be impolitic, that a tax should be allowed to exist in the Poona Collectorate, which is productive of such effects as those described in the Collector's report, has resolved, on

the immediate abolition of the *Veer Hoonda* in that Collectorate, being convinced, that the benefit which may be expected to result to the Ryot, and ultimately to Government, will more than counterbalance the trifling losses of revenue, which this measure will at first occasion.

In reference to the 8th para: of your letter, I am directed to state, that His Lordship in Council does not deem it expedient to substitute for the Veer Hoonda, an increased Assessment on lands actually irrigated. If it is considered advisable, the rates levied on Bagayet lands may hereafter be increased, but considering the evil effects of the Well tax, and how desirable it is to encourage Well cultivation, such a measure should not at present be adopted.

Adverting to the 12th and 13th paras: the Right Hon'ble the Governor in Council is pleased, for the reasons therein stated, to direct, that for the present the Bagayet rates, which obtain in the Ahmednuggur Collectorate, be reduced in those Villages, where they are found to be excessive. His Lordship in Council approves generally, of your suggestion in the succeeding paras: and considers, that the principles explained in the 19th para. on which your recommendations are grounded, are peculiarly applicable to the Deccan.

His Lordship in Council defers coming to a decision upon the subject, as regards Candeish and Sholapoor, until your promised reports are received.

You will be pleased to cause the necessary measures to be adopted, for giving effect to these instructions.

Mr. Williamson, the Revenue Commissioner, addressed a letter, to the Chief Secretary, under date the 2nd of August 1834, of which the following is a copy.

In reference to the 20th para: of my letter, to Mr. Secretary Reid, dated the 15th October 1832, I have the honor to forward an original letter from the Principal Collector of Poona, transmitting one from the Sub-Collector of Sholapoor, reporting upon the operation of the "Hoonda" or Well tax, in that Sub-Collectorate.

2nd. The Right Hon'ble the Governor in Council will observe, from the details given in Mr. Andrews' report, that the reasons urged in my letter of the 15th October, against the continuance of the "Veer Hoonda" apply with equal force, to the Sholapoor Talookas.

3rd. Entirely concuring in the views expressed by the Principal and Sub-Collectors, in favor of a return to the old system of taxing Bhagayet Lands, I would respectfully propose, that the

plan suggested in the 11th to 13th paras: of the Sub-Collector's letter, be adopted.

4th. In the 13th para. Mr. Andrews states his reasons, for thinking "Every Merasdar or hereditary occupant of land, should "be allowed to convert any portion of his Meeras Lands into "Bhagayet-Lands, without being subjected to an increased as- "sessment, so long as he continues responsible for, and pays the "revenue, due on the whole of his estate." As this measure is calculated to attach Merasdars to their lands, and add to the value of their tenure, while the restriction requiring the whole of the land to be cultivated, will tend to prevent "the abandonment of "his less productive Lands" and thus redound to the advantage of Government, I beg respectfully to recommend the adoption of the suggestion.

5th. Expedient as it may be to revert to the old rates, it may often happen, that they are excessive or unequal. In such cases enquiries should be made (on the spot, if possible) and reductions or modifications determined in reference to local circumstances.

6th. I observe, Mr. Andrews states, that a number of Wells have fallen into disuse and been thrown up. When this is the case, he should take measures to bring them again into use.

7th. The nature of those measures must depend on natural peculiarities, of which the local Officers will be the best judges: small advances (Government sanction being obtained) might sometimes be necessary, while in other cases the same objects might be attained by a reduction of the assessment for a limited number of years.

8th. In reference to the last para. of the Principal Collector's letter, I beg to observe, that Government exempted lands irrigated from Wells in the Poona Districts, on special grounds; but as stated in the 3rd para. of Mr. Secretary Reid's letter of the 20th November 1832, an extra cess may be imposed at some future period, if it is considered advisable. When the system has been longer in force, I shall request the Principal Collector to report on its operatio

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The following is a copy of the letter from Mr. Baber, the Principal Collector of Poona, dated the 14th of June 1834, which accompanied the foregoing letter from the Revenue Commissioner.

1st. I have the honor to forward copy of a letter from Mr. Andrews, reporting upon the operation of the "Veer Hoonda" or Well Tax, in the Sub-Collectorate under his charge.

2nd. Government having been pleased to abolish this tax, in consequence of the injurious effects that had resulted therefrom

in the principal Division, and it appearing by your letter of the 2nd of January 1833, eventually, to be the intention of Government to abolish it likewise in the Sub Collectorate, it only remains for me to offer an observation or two, upon the arguments adduced by the Sub-Collector, in favor of that measure.

3rd. Mr. Andrews has described at large, the evils of the "Veer Hoonda" system of taxation, and the difficulty of remedying them by any modification of it; at the same time, that he is of opinion, the "Veer Hoonda" should not be unconditionally given up, but that there should be substituted for it, an extra cess, as formerly.

4th. In this latter suggestion, I have to express my entire concurrence, and this not merely, in consideration to the great sacrifice of Revenue in the Sub-Collectorate, amounting to Rupees 10,907 for the year just closed; but also from the tendency of an opposite measure to induce the Ryuts to relinquish their Zerayet for, or be content with the larger profits derivable from their Bagayet Lands.

5th. Mr. Andrews proposes, that the old rates be re-imposed without reference to the present rates of Zerayet Lands, in preference to remodelling the Bagayet rates, which latter would be both a work of labour and time, besides being extremely hazardous, from the necessity of calling in native agency. The great advantage of the plan is, that there would be no innovation of former customs, it being an established principle throughout India, that Bagayet Lands, as being more productive, should pay more than Zerayet Lands. Mr. Andrews, indeed, states, that, "in many instances the people had expressed their willingness "to pay an enhanced rate of Assessment for the Bagayet Lands, "and this sometimes, even where that was, and would be, higher "than the total of what they now pay for the Land at the Zera- "yet rates and the Veer Hoonda"—Where the enhanced rate, from any peculiar cause, pressed heavier upon some Lands than others, a proportionate decrease should be made in the Assessment.

6th. With this view of the subject, I not only concur in Mr. Andrew's proposal, but I would extend the principle to all Bagayet Lands, without distinction, throughout the principal Division, as well as the Sub-Collectorate.

The following is a copy of the letter from Mr. Andrews, the Sub-Collector of Sholapoor, dated the 5th of June 1834, which accompanied the foregoing letter from the Revenue Commissioner.

1st. I have the honor to acknowledge the receipt of your letter of the 26th instant, calling upon me for my opinion, of the operation of the Well tax in the Sub-Collectorate.

My attention had been already called to the subject; and I feel it incumbent upon me to reply to these references, but I do so with considerable diffidence, and regret, that it should have been necessary so soon to call into action my very limited experience of it by the expression of an opinion on so important and difficult a subject, more particularly when so much of my time and attention have been necessarily devoted to the correction of abuses, the trial of delinquents, and the introduction of some of the most essential rudiments of our revenue administration. These circumstances, will, I trust, obtain for me the favorable consideration of my superiors, for any thing that may appear deficient in my treatment of the subject, and to them, will, I hope, be attributed, in a great measure, whatever may be thought more unsatisfactory than it might otherwise have been.

3rd. The "Veer Hoonda" was first introduced into the Barsee and Sholapoor districts of this Sub-Collectorate in Fusly 1241 (A. D. 1831 | 2,) in Mahole it had been introduced in Fusly 1240, (A. D. 1830 | 31,) when it was attached to the Principal Division of this Zillah. The total amount of Revenue derivable from this item in the three districts in Fusly 1241 (A. D. 1831 | 2,) was Rupees 7605. In the following year it was Rupees 8137, inclusive of remissions, and in the year just closed, Fusly 1243, (A. D. 1833 | 4,) it was Rupees 10,907, being about 2719 Rupees more than it was the preceding year, owing to an additional number of Wells having become subject to the Assessment, from different causes.

4th. From returns from which the annexed statement has been made, I find that the total number of Wells which have fallen into disuse since they were subjected to the tax, amount to 419, yielding a revenue of Rupees 5,255, and the additional imposts this year have created a considerable clamour, and been the subject of numerous petitions. The excitement thus created, could hardly, in itself, be considered a fair criterion, whereby to judge of the general merits of the question, as justice or expediency are allowed little weight with parties who have to pay a new tax, in the first moments of disappointment; nor was it possible for me personally to enter into particular enquiries into every complaint; and individual cases of hardship, unless they appear to originate in something inherent in the system which is objectionable, could scarcely with safety be admitted as grounds, for forming an unfavorable opinion of its operation in general.

5th. The causes which have subjected the additional number of Wells to the tax this year, may be divided into three classes vizt. 1st Another person than the owner having worked the Well. 2ndly. Wells newly worked, they having been repaired and cleaned. 3rdly. The owners of Wells having, from inability, to pay their balances due to Government forfeited their exemption from the

tax, they resigned them to other members of their families, and they were taxed accordingly.

6th. It is evident, that the rules which occasioned the taxation of the Wells in the two last classes, would frequently be inexpedient and harsh in their operation, and therefore objectionable; but the great practical objection to the tax is, I think, that noticed by the Revenue Commisioner, in the 5th para. of his letter of the 15th October 1832, viz. that the amount of the tax is not regulated by the extent of the land actually irrigated by it, which from the impoverished circumstances of the Ryut, or from a deficiency of water in the Well from drought, might be frequently considerably less than what was calculated upon, in determining the amount of the impost, and in fact, I have found this to be a very general ground of the complaints.

7th. It is also a tax odious to the people, as being from its nature so direct upon what they have hitherto prided themselves upon, as their most valuable property, in many instances they have expressed their willingness to pay an enhanced rate of Assessment for their Bagayet Lands, and this sometimes even, where that was and would be higher than the total of what they now pay for the Land at the Zerayet rates and the "Veer Hoonda."

8th. It is unpopular also and liable to create mischievous discontent and envy, from the circumstance of a Well cheaply constructed being liable to taxation, when another close to it perhaps, and probably of greater capabilities is exempted, on account of its original costliness, feelings which would frequently be indulged in, by the poor taxed Ryut, and which he is little likely to subdue by a conviction of the justness of the regulation creating the invidious distinction, only to be arrived at, after nice and laborious calculations, which he is little likely to enter upon with his irritated feelings, if at any time incapable of understanding them. This however is an objection less practically evil in its tendency than the former, as provided the tax, leave him still a profit, he is not likely to abandon the source of it, merely because his neighbour derives a greater.

9th. Another objection to the present system is, not only that it is wanting in simplicity, but that it is exceedingly open to fraud; and that this is not merely a speculative, but a practical evil, I have experienced in the course of my enquiries into the subject, having found Wells really held and worked by, and for the benefit of parties not entitled to exemption, still paying no tax, being fraudulently continued in the names of the owners or mortgagees who are so. This is an effect extremely difficult to guard against, and one highly injurious to the interest of Government, who, it will be observed, by a comparison of columns 4 and 8 of the accompanying statement, were subjected to an immediate sacrifice of about 8,962 Rupees; the loss actually already sustained, appears by a compa-

rison of column 4 with column 16, to amount to about 12,000 Rupees; a fact of considerable importance in determining on the operation of the system.

10th. If reference be made to the experience of the two and three years during which this tax has been imposed, for an argument either favorable or unfavorable to its operation, on the whole nothing very satisfactory is to be derived from it; for the proportion of Wells hitherto abandoned, appears very inconsiderable to what it seems to have been in the Poona districts, and many others have been newly assessed, but at the same time, though no conclusions so decisively unfavorable to the tax, can be drawn from past results, I am disposed to think, that the effect having as yet been less mischievously felt, is owing perhaps, to the circumstance of Wells being the only source of irrigation here, which they were not, I believe, in many of the Poona purgunnahs, and which has had a strong countervailing influence, in spite of the natural tendency of the tax. I have lately heard, that at present many Wells are about to be abandoned, and some have actually been so, principally from the circumstance of the supply of water being insufficient to enable the Ryot to pay the whole tax; unless therefore it be abolished, it is probable, that another years' trial would be so unfortunate as to afford us more decisive proof of its inexpediency.

11th. Should it be determined to abolish the "Veer Hoonda" it these districts, I am by no means disposed to think, that it should be unconditionally given up, but that there be substituted for it an extra cess as formerly on Bagayet Lands actually under irrigation; and as the total amount of Revenue derivable from those lands in the years preceding the introduction of the "Veer Hoonda" in these districts respectively was about Rupees 42,270, Government would probably feel little disposed to make so large a sacrifice, nor do justice or expediency demand it, as it is, I believe, universally allowed, that the principle which assesses at a higher rate those lands which yield a more valuable and certain produce, is a perfectly sound one, and as having been generally acted upon throughout India, it is certainly quite consonant with the usage of the country, and the feeling of the people.

12th. Should it be determined on, to revert to the former system, there is considerable difficulty in determining satisfactorily what this enhanced rate should amount to. Before the introduction of the Revenue Survey rates, the rates of Bagayet Lands were, without any exception, that I am aware of, double those of the Zerayet lands of the Village, and they thus varied from 2 to 3 Rupees per Beega, which considering the value of the products, particularly in years of general scarcity, can hardly be deemed excessive. I am inclined therefore, with deference to recommend, that the old rates be again imposed, without reference to the present rates of Zerayet lands, which have been altered

in every village. To attempt to remodel at once all these Bagayet rates, would be a work of labour and time, and hazardous too, as it would be necessary to intrust much to native agents, in whose integrity little confidence is to be placed, but as cases of hardship may come to notice in the operation of the plan above proposed, enquiry could be made with comparative ease, and a remedy applied.

13th. Though I think, that a due regard to the exigencies of the state requires, that the enhanced rates should be reimposed on those Bagayet lands that formerly paid them, yet the welfare of the state and the public are equally concerned, that every proper encouragement should be given to the extension of irrigation, and the consequent production of valuable crops. Every Meerasdar or hereditary occupant of land, should be allowed to convert any portion of his Meeras lands into Bagayet lands, without being subjected to an increased assessment, so long as he continues responsible for, and pays the revenue due on the whole of his estate. This restriction the interests of Government seem to render it necessary to impose, to prevent the abandonment of his less productive lands, though it certainly may be a departure from some of the most generally approved principles of political economy. But we are in a great degree in an anomalous position in this country. From the depressed state of the markets (except in a year of scarcity, when a few monopolists contrive for a short time to raise the prices disproportionally high) arising, probably, not so much from a superfluity of the produce compared with the entire population, as from an absence of wealthy consumers, and a want of circulation of money, there appears to be a disposition in the agricultural classes to contract the cultivation of their lands within the limits of their immediate wants; it will be generally found therefore, and it is often proved in Khasbundy Villages, that Ryots will confine their whole labour to the more productive portions of their lands, abandoning the rest, for which they expect to obtain a remission as waste. By this means the interests of Government irremediably suffer, for though it is true, that the Ryot might get himself into somewhat better circumstances, yet he would probably continue a cultivator still, and as long as the market remains the same, it is not likely, that he would, if a prudent man, reduce his profits by cultivating his inferior lands, or extend his cultivation to others; and as it is not in this, as it is in European countries, that in proportion to the increase of his wealth, a man consumes a greater quantity of taxed commodities and thereby becomes a contributor in some way or other to the treasury of the State, the loss of the revenue derivable from a Ryots land is sensibly felt, and is irrecoverable almost by any other means, and unfortunately this being the grand source from which the State derives its support, it seems most important, that its amount should be kept up by every possible means not to impoverish the Ryuts, but with a less regard

to their pecuniary interests than under other circumstances might be paid, and to that extent therefore until affairs take (if ever they should) a more favorable turn, the interest of Government, and those of the agricultural classes, would seem to be opposed.

14th. It sometimes happens also, that an Oopree cultivator, or other speculator, will undertake the construction of a Well, and the convertion of his Zerayet lands into Bagayet, on the easy terms of bestowing the lands he already cultivates, or Ghut Kool lands belonging to the village on the Meeras tenure, and with the condition of exacting no higher a rate for the improved portions, these opportunities should never be allowed to slip; they tend to increase the general comfort and prosperity of the community at no immediate expense to any one, and if at any distant period it should happen, that these exempted cases should become so numerous in any village, as to act injuriously on the interests of those who pay the enhanced rates, the Government would then be in a position to afford to remit them.

15th. I have to apologize, for having digressed at such length, but I thought it necessary to explain the grounds of my observations.

The foregoing letter from the Revenue Commissioner, was replied to by Mr. Secretary Reid, on the 27th of September 1834, in the following terms.

2nd. His Lordship in Council agrees with you, and the subordinate Revenue Officers, in thinking that the Veer Hoonda should be abolished in the Sub Collectorate of Sholapoor, as it has already been in the principal division; and that the old system of assessing the Bagayet lands, at enhanced rates, should be reverted to, as suggested in paras. 11 to 13 of Mr. Andrews letter of the 5th of June last. The Bagayet rates in force, previously to the reveuue survey, which can doubtless easily be ascertained, will form the ground work of the change now to be introduced, but where these are excessive, such abatement as may seem requisite, should be made.

3rd. The holding of Meerasdars may differ so materially in respect to the quality and position of their lands, and their capability of being converted from Zerayet into Bagayet, that however highly Government may, upon general principles, approve of the recommendation, that a Meerasdar paying for the whole of his Meeras lands, should be allowed to improve his property by irrigation, without being subject to enhanced rate of assessment, still, His Lordship in Council thinks it necessary, that some restriction should be imposed on the universal adoption of the rule, in order, to preserve as much as possible, an equal bearing of the assessment.

4th. The obligation under which one Meerasdar, holding a small improveable property, binds himself to keep it in full cultivation, with the view of being exempt from the Bagayet rates on lands which he may water from new Wells, will be very different in degree from that incurred by a more extensive proprietor possessing lands not perhaps so capable of improvement. The Right Hon'ble the Governor in Council therefore considers, that each case should be decided by the Revenue authorities on *its particular merits*, and that the indulgence proposed, instead of being made applicable to all Meerasdars, should be extended to those only whose unirrigated lands would bear some fair proportion to those brought under the exemption, so that Government might not relinquish its dues without deriving some commensurate advantage. It should be borne in mind, that Government is not recognizing a right, but conferring a boon, and that, therefore, such a limitation cannot, on the grounds of justice, be objected to.

5th. The Sub-Collector should endeavour, by all means in his power, to bring the deserted Wells into use again. Small Tuccavee advances, temporary abatements of assessment, and even in extreme cases, where the Wells have been long disused, an application of the principle advocated in the preceding para: may be resorted, to attain this end.

6th, In reference to the concluding para: of your letter, I am

instructed to inform you, that Government will await your further report, when you may have received from the Principal Collector at a further period, such information relative to the operation of the orders of Government of the 20th November 1832, as will enable you to form an opinion on the expediency of continuing the total exemption in the principal division, or of introducing there, as at Sholapoor, the increased rates of assessment on Well irrigated lands.

7th. You are requested to issue the requisite orders, as soon as possible, in order that the Sub-Collector may be enabled to carry the proposed change into effect, during the ensuing settlement.

Mr. Williamson, the Revenue Commissioner, addressed a letter to the Secretary in the Territorial Department, under date the 11th of November 1834, of which the following is a copy.

In reference to your letter of the 25th November 1832, on the subject of Well irrigation in Candeish, and requesting me to state my opinion, whether it might not be sufficient to lower the rate of "Koorud," to a standard, but little above that of the usual "Zerayet," and to exact it only when the land has been left unirrigated from causes which were under the control of the holder, I have the honor to state, that I am afraid that plan would be found inconvenient in practice, as it would be difficult to ascertain when the enhanced rate ought, in justice, to be taken, and when not.

2nd. Before replying to your reference, I thought it advisable to take the Collector's opinion on the subject, and in noticing the point above alluded to, he states "it would generally be impos-" sible to fix upon the Ryut, with certainty, the charge of un-" necessarily abandoning the cultivation."

3rd. From the correspondence which has already passed on this question, Government must be aware, that Mr. Boyd proposed to reduce the "Mothustul" Assessment, or full rate on land irrigated from Wells to the "Koorud Dur," which amounts to half of that Assessment; but to a good deal more than the general "Zerayet," or dry land rate. I did not concur with Mr. Boyd, for the reasons stated in my letter of the 13th October 1832, (paras. 22nd to 24th) and 16th November last.

4th. Various questions are constantly arrising regarding Well irrigation in Candeish, the determination of which must necessarily depend on local peculiarities, and be left to the Collector's discretion.

5th. But to meet the difficulties which attend the Assessment of these lands in Candeish, and to remove the objections which arise from the inequality and excess of the "Koorud Dur," I continue

of opinion, that the best plan will be to levy only the "Zerayet" rate on lands not irrigated, and to reduce the "Mothustul" rate on irrigated lands, whenever it appeared on investigation to be too high.

6th. As observed in my letter of the 16th November, the highest "Zerayet" rates would generally be leviable on lands subject to the "Koorud Dur" for the soil is usually of a superior quality.

7th. I beg to submit a copy of Mr. Boyd's letter, to which I refer in the 2nd *paragraph*.

The following is a copy of the letter from the Collector of Candeish, dated the 27th of February 1834, which accompanied the foregoing letter from the Revenue Commissioner.

2nd. The plan suggested by me in a former correspondence, for the remission of, and reducing the rates of Mothustul, was intended to ensure the increase of irrigated cultivation, by reducing the rate of Mothustul and assimilating the tax upon Korud with Bagayet, and thereby creating a dependance upon, and a connexion with each other; which might eventually increase the extent of this, the more valuable and productive description of agriculture.

3rd. The sacrifice is, I admit, considerable; and from the general poverty of the people, it might perhaps take some time before Government was reimbursed, but without sacrifice in these cases, little can be effected; my plan is evidently costly, but as far as my judgment goes, would tend to great future advantage to the country.

4th. In reference to the 5th para: of your letter to Government of the 16th November last, I beg to explain, that I never contemplated any new introduction of "Koorud" rate, as it appears to me, you have understood me to suggest. The Koorud rates are now actually in general use; and, as I perfectly agree with you "impose too high an assessment upon Lands adjoining Wells, but not irrigated" so that, that part of the evil is in full force as it is; my idea is to alleviate the hardship, by reducing the high rates of watered lands: and which lands are always connected by local position with the Koorud, to its own standard of taxation, by a measure having the effect of averaging the rent. I have intruded this para. upon your notice, in case you had mistaken me, on this point.

5th. The other method of relieving the cultivators of watered land, laid down in your letter, paras. 9th and 10th, is no doubt, unobjectionable, is perfectly simple, sure in its operation, and attended with comparatively trifling sacrifice, tho' I doubt its being as capable of eventually increasing the irrigation. The

difference in reducing Koorud to Zerayet may be considered at a loss of 10,000 Rupees, and the reduction of excessive Mothustul rates, to a fair assessment at 8,000 Rupees more, this completely separates the two classes of land; and still leaves, in my opinion, the Bhagayet rates in Candeish too high; and if we go further, the loss of Revenue may again present itself as an obstacle.

6th. With regard to the proposal of lowering the "Koorud Dur" in the manner described in Mr. Reid's last para. I am of opinion, that it would by no means prove applicable, for it would generally be impossible to fix upon the Ryut with certainty, the charge of unnecessarily abandoning the irrigation.

In reply to the foregoing letter, the Revenue Commissioner was addressed by Mr. Secretary Reid, on the 29th of November 1834, as follows.

The Right Hon'ble the Governor in Council has determined on reducing the Koorud Dur altogether on the Well cultivated Lands in that province, which remain unirrigated, and levying on them the Zerayet rate of Assessment only; you will be accordingly pleased to instruct the Collector, to carry this reduction into effect.

2nd. With reference to the concluding part of the 5th para. of your letter, I am desired to observe, that the Collector in Candeish has already been authorized to reduce the Mothustul rates whenever they are excessive, which operation will, His Lordship in Council consider, prevent such Lands from being thrown out of cultivation, in order to become liable to the smaller or Zerayet rates only.

The following are extracts from a letter dated the 16th January, 1835, from Mr. Williamson, the Revenue Commissioner, to the address of the Secretary in the Territoral Department, forwarding the annual report of the Collector of Ahmedabad, for the year 1833 | 34.

3rd. In paragraphs 6 to 14, the Collector describes the exertions made by the Ryots, to raise crops by means of Well irrigation. The liberal aid they received from Government, had an excellent effect. The Ryots were thus enabled to clear out, and construct a number of Wells, which while they afforded them seasonable relief during the past scarce year, will remain a substantial addition to the permanent resources of the district.

15th. In paragraph 59th the Collector has inserted a statement of the number of "Gunwuts" he has issued for new Wells—a Gunwut is simply a lease prescribing the terms under which the land ir-

rigated from the Well is to be held for a certain number of years. The terms are very simple. They exempt the irrigated crop from assessment from 5 to 12 years, during which period the tax on the Kureef, or monsoon crop, is in most cases levied as usual.

16th. The period of exemption depends on the depth the water lies from the surface, the probable cost of the Well, the liability of its falling in, the fertility of the land, the quantity, and quality of the water &c. &c.

17th. The plan answers in practice much better than any I have seen tried. The Ryots understood it, and it accommodates itself to local peculiarities, which, where difficult to surmount, are met by a long period of exemption, and those peculiarities exist in great varieties in the Ahmedabad district. In some parts water is found in a rich alluvial soil, at a depth of 10 or 12 cubits. In other, the soil is poor, and water lies as deep as 50 or 60 cubits from the surface.

18th. In settling the terms of a "Gunwut" the Ryot should be dealt with as liberally as possible, two or three years of exemption being allowed him longer than may be necessary (according to arithmetical calculations) to cover his charges. The sinking of Wells is a work of risk as well as expense.

19th. As the collectorate of Ahmedabad is capable of incalculable improvement from an extension of Well irrigation, every exertion should be made to encourage it, small loans might occasionally be made, with advantage to the Ryots for this purpose, and lists having been prepared by the Collector and his deputed Assistants, of cases in which they were wanted, he should apply, through this department, for Government's sanction to them. I am rather disappointed to find, that only five Gunwuts were granted last year in the Dholka Purgunnah, as there is no part of the district where Wells are so advantageous, but this may be accounted for in the extensive mortality which took place among the cattle.

The following extracts are the portions of the annual report of Mr. Borradaile, the Collector of Ahmedabad, dated the 25th Sept. 1834, which are alluded to in the foregoing extracts.

The past year has been one of scarcity, owing to the failure of the monsoon of A. D. 1833, followed by the flights of Locusts, which destroyed the Kureef, or monsoon crop, in almost every part of the country north of the Myhee, and in the Western districts, wherever the partial showers which fell, allowed of any rain crop being raised.

7th. The cultivators were driven to have recourse to irrigation, and happily for the country, the number of Wells, including those

fallen in, and of which the sites alone were known, has been sufficient to ward off famine, and greatly to mitigate prices, to the saving of the poorer classes.

8th. Almost every old Well in the country, has been cleared out and worked in the present year, being generally repaired by the cultivator who opened it, so far as to enable him to use it during the season. The trifling expense of doing this was covered by the crop, and they would be allowed again to fall in and fill up, remaining closed until the return of another year of scarcity renders it worth the cultivators' while, to go to the expense of clearing them again, did not Government step in to aid them.

9th. The poverty and improvidence of the cultivators in this Zilla prevents their providing, at the time of such pressure, a resource against future suffering, by putting these Wells into substantial repair, and whether from the weight of the assessment on Well cultivation, or the state of prices, or other cause, there is not employment in an ordinary season for all the Wells which, in one like the past, are required to afford profit, as well as subsistence to the cultivating classes.

10th. In a scarce year, their attention being exclusively devoted to raising grain, wheat, barley, Jowaree and Bajeeree, as their second or Rubbee crop or garden produce, such as is in general demand for condiments, is neglected. In other years, the cultivator in ordinary villages, confines himself to the care of his monsoon crop, and does not trouble himself about Well cultivation. The ordinary price of grain would not remunerate him for the expense, and the cultivation of other produce seems generally confined to the tracts of land in the neighbourhood of the principal rivers.

11th. The villages between the Kharee and Saburmuttee, and the others in the line of those streams on either side, are the principal ones for Maliat or garden produce.

12th. It does not appear to be the interest of a cultivator to try these products elsewhere.

13th. Rice in this quarter requires irrigation unless the monsoon has been very heavy, and the fall of rain constant during that season. The water is supplied from Tanks or Wells. If the rains in the last two or three seasons have been slight, so as to leave only a small supply in the Tanks, and if they are not replenished by sufficient rain, they fail, and the crop is lost. It is only in particular spots that the water of Wells is sweet enough to answer for bringing the rice crop to maturity. In the rice districts, near the null or great western lake, the soil is too salt to admit of Wells being sunk, and the rice in that quarter entirely failed, not only last year, but for the two seasons preceding, owing to the slight monsoon. And there was a general failure of this crop

every where, since enough rain did not fall to bring up the Dhuroo or plants.

14th. From these causes no rice was raised last year.

59th. My attention was particularly drawn by your instructions to the granting of leases (Gunwuts) for new Wells. They have accordingly been given in the three Purgunnahs settled by me, to the following extent, forty nine in Duskrohee, seven in Dholka, and five in Veerungaum.

The following is an extract from the reply by Mr. Secretary Reid, dated the 10th of March 1835. to the Revenue Commissioner's letter above quoted.

2nd. It is, I am desired to observe, fortunate, that the attention of the Collectors has been so much directed to the repair of their Wells, every effort should now be made to keep them in a proper state, and to encourage the construction of new ones, and the reclaiming of the old ones which have fallen in, and may now be useless for agricultural or domestic purposes. The system of Gunwut which you describe, as being well adapted to this part of the country, should be encouraged, and where necessary, small loans should be made, as suggested in the 19th paragraph.

The following is an extract from a letter dated the 30th of April 1835, from Mr. Williamson, the Revenue Commissioner, to the address of the Secretary in the Territorial Department, forwarding the Annual Report of the Collector of Ahmednuggur, for the year 1833 | 34.

27th. In paras. 103 at 110 is discussed the expediency of reducing the assessment on lands irrigated from Wells, owing to the general nature of Mr. Mills remarks, it is impossible to draw any decision conclusive from them. They clearly show, however, that little or no progress has been made in reducing the assessment on Bagayet land (as I lately observed to the Collector) agreeably to the directions sanctioned in Mr. Secretary Reid's letter, dated the 20th November 1832.

28th. Mr. Mills suggests in paragraph 108, that one uniform reduction of one half, be made in the Bagayet rent, but in that opinion I cannot concur, for as the rates, I am satisfied, are not equally excessive, neither should the abatement be at one uniform rate. In some villages, or circles of villages, this uniformity may exist, and in such, a uniform reduction should be made. Talking of the origin of the existing rates, Mr. Mills remarks in paragraph 105. "It is fair to infer, if these rates were fixed by

" the native Government, whose officers were well acquainted " with the subject, that they were determined and fixed with " reference to local advantages, whether of soil or contiguity to " markets." The inequality of the assessment to be found in almost all our new acquisitions, shews, that the above agreement could never stand as a practical rule of assessment. A knowledge of the nature of native Governments may suggest causes for unequal rates, quite unconnected with the local advantages which Mr. Mills supposes. A nefarious Mamlutdar occasionally imposed an extra Puttee on such villages or Mahals as had not courage or interest to enable them to resist his demands. Generally speaking, villages thus heavily burdened deteriorated, and the state of a village, may be considered an index to help, to shew, whether or not, it is unfairly assessed.

29th. I do not participate in the fears Mr. Mills expresses, of the present Wells falling into disuse, in consequence of Government having remitted the assessment on new Wells. That remission has now been in force two years, and so far from having had that effect, it has, I believe, led to the construction of comparatively few Wells. Though the Bagayet assessment is no doubt, in many places, too high and badly regulated, the difference (except in Sinnur, Chandore, and a few other places) between it and the Zerayet rate, is not very great. The Wells are often capacious, costly old works, highly valued by the cultivators, and worked under advantages, which I do not think, competition is likely to affect materially. To irrigate with profit, the Ryot must command good water, and other advantages of soil and situation, which in the rocky mountainous districts of the Deccan, are only found among the nooks and vallies of the lower lands, where irrigation so peculiarly depends on natural advantages, the kind of competition, Mr. Mills speaks of, is, I think, little to be feared, and even if it did in the course of time prevail, it would scarcely fail in the end, of benefiting the Ryots, if it did not directly improve the Revenue. Government however is competent at any time to modify the rule in question (except as concerns Wells built, while it was in force) and I would suggest, that its operation be confined to four years longer, when the Collector should report on its effects, and if Government sees fit, it may then be altered.

30th. I quite agree with the Collector, in thinking, that the Assessment termed Pan Barreet, levied on Zerayet lands, made into garden lands, as described in paragraph 111th, is a very impolitic Tax, and I respectfully beg to recommend for adoption his proposition, to abolish it.

The following is the portion of the Annual Report of Mr. Richard Mills, the Collector of Ahmednuggur, which is alluded to in the foregoing extract.

103. The most important of all the measures which have as yet been undertaken, are those, connected with the reduction of the rate of Assessment on Bagayet or garden lands, and the encouragement which has been given to Bagayet or garden cultivation, by exempting the land in which a new Well may be built, from the increased Assessment altogether, and reducing the Assessment one fourth on that land watered by Wells, which have been destroyed, but which the owners have rebuilt or repaired.

104. My predecessor in office seemed to be of opinion, as communicated in the 11th para. of your letter dated 15th October 1832, to Government, that there is little reason to expect an extension of Bagayet cultivation, from a substitution of the inferior for the superior rates, owing to a want of a market for, and the consequent low prices of agricultural produce, but he subsequently suggests, that the Assessment on irrigated land, which is high, should be reduced as an experiment, one third, or one fourth. The plan was not approved of by you, but you suggested, that the rate on Bagayet lands should be reduced only in those villages, where after full enquiry, it was found to be too high.

105. There is probably no measure so difficult, as that of determining and fixing the Assessment to be levied from land. It requires a thorough local knowledge, and much greater information, than Collectors can obtain, during the short time they usually reside in a district. It is quite clear, from there being unequal rates of Assessment, that there either must be unequal powers of production in the soil, or unequal advantages in disposing of the produce. It is fair to infer, if these rates were fixed by the native Government, whose officers were well acquainted with the subject, that they were determined and fixed with reference to local advantages, whether of soil or contiguity to markets, which afforded a facility of disposing off the produce. To reduce therefore the Assessment in one village, in which we may imagine the rates to be high, as suggested by you, would in fact, if the principle I have assumed be correct, be to give the Ryots of that village, a decided advantage in enabling them to sell their produce at a less rate than a neighbouring village, which from the rate of Assessment being comparatively low, we might be apt to consider, was not too high.

106. From this reasoning therefore, you will observe, that I am disposed to concur with my predecessor, in recommending a general reduction of the rate of assessment, on all the garden cultivation in this Zillah, with the exception of Potusthul and garden land on the Khasbundee and Moodbundee systems.

107. This reduction appears now to be especially called for, since the recent proclamations, exempting lands in which a Well has been built from Bagayet, or the high rate of Assessment, and also land watered from a Well which has been repaired, from one fourth of the high Assessment. The tendency of these measures

under existing circumstances of the high rate of Assessment of regularly cultivated garden land, must be to throw that into disuse, for its produce cannot come into the market with the same advantages to the growers, as the produce of the land partially or wholly exempted from the high rate of Assessment, and thó for some years probably, owing to the unwillingness of the Ryots to give up their lands, or from their ignorance of the cause of the reduction of their profits, the Ryots may continue to cultivate, yet the end must inevitably be, that the old Bagayet land must be abandoned.

108. I am therefore fully satisfied, that the only measure which can insure to Government the steady cultivation of the present Bagayet land, is the reduction in the Assessment of them, and for the reasons and arguments in this letter, it is to me quite obvious, that reduction must not be partial but general, and my experience, and the enquiries I have made into the subject, induce me strongly to recommend, that the high rates on old garden land should be reduced one half of their present rate, throughout the Zillah.

109. The Kumall of the Bagayet land in this Zillah is 102,889 Beegahs, yielding an Assessment of three lacs and twenty eight thousand Rupees, and the Bagayet land cultivated last year, was 79,686 Beegahs, yielding a revenue of two lacs & fifty thousand Rupees, and the remainder of the Bagayet land uncultivated was 23,202 Beegahs, yielding a revenue of seventy eight thousand Rupees, and the amount to be sacrificed will be therefore only the difference between the highest rate of Zerayet Assessment, and the present Bagayet rate of Assessment.

110. In the greatest number of villages the whole of the old Bagayet land is not cultivated, owing partly to the poverty of individual Merasdars, and partly to the high rate of Assessment. The immediate effect therefore, of reducing the Bagayet rates one half, will probably be to bring all this land into cultivation, and considering the present state of the country, the price of produce, and the measures which have been introduced relative to the extension of Bagayet cultivation, the present high rates, if continued, must inevitably have the effect of throwing the old Bagayet land altogether out of cultivation.

111. Another system has hitherto existed in this Zillah, which I consider very prejudicial to industry. It is levying an extra Assessment above the Zerayet rate on Zerayet land made into garden land, and watered from Wells &c. It it called the "Pan Burreet" Assessment. It is generally levied in an arbitrary way, according to the crop produced, and the ability of the cultivator, and is therefore a direct tax on the industrious. It amounted last year, to 9157 Rupees. It, in my opinion, is obviously an impolitic tax, and from enquiries I have made, it appears, that it never existed under the native Government, but seems to have been levied since the establishment of the British

authority, in consequence of all the land, both Bagayet and Zerayet, not having been cultivated. The amount is small, and from numerous complaints regarding the Pan Burreet Assessment, and its arbitrary mode of settlement, I am fully persuaded, that it is a tax which is severely felt, and that it has had the effect of preventing much dry land being artificially irrigated, and I therefore beg leave to recommend, that it be abolished by proclamation, and the Ryots informed, that they alone shall benefit from their exertions to save their crops, and that no extra Assessment above the Zerayet rate, shall be levied from them, in consequence of their irrigating their Land.

The following is an extract from the reply by Mr. Secretary Reid, dated the 7th of September 1835, to the Revenue Commissioners letter above quoted.

40.. The question of assessing irrigated lands, is one which admits of a wide latitude of discussion, but which can be best determined by the test of experience. The Governor in Council considers it, therefore, desirable, not to disturb existing arrangements till the expiration of four years, when, as you recommend, the question can be reconsidered. In the meantime the orders of the 20th November 1832, reducing and modifying the Bagayet rates, must not be lost sight of, the Collector should be directed to carry them into effect, without further delay.

41. The recommendation submitted by you, in para. 30, for the abolition of the Pan Burreet Assessment, is acquiesced in, by the Governor in Council.

Mr. Williamson, the Revenue Commissioner, addressed the following letter dated the 4th of February 1836, to the Secretary to Government in the Territorial Department.

While in the Sholapoor districts, I found that the Principal Collector had issued an order for suspending the collection of the Assessment on Bagayet Lands, in consequence of difficulties that had arisen respecting the rates, owing to some injudicious measures of the late Sub Collector, which are explained in the accompanying correspondence.

2nd. Seeing no necessity for suspending the collections, and the prospect of no collections being received at all, if the suspension continued long, at a period when the garden produce was already ripe or hastening to maturity, I revoked the Principal Collector's order in a dispatch, of which a copy accompanies.

3rd. With the view of expediting a settlement and acquainting myself with the state of the question, I visited two villages myself,

where there was a considerable extent of Bagayet Land, and fixed what it was to pay on the spot. I deputed my assistant, Mr. Frere, to two other villages, and the information that intelligent young officer has collected, will prove very useful in shewing the real state of the question at the large village of Jamgaon, where the dishonesty of the village authorities had increased the difficulties of getting at the truth.

4th. It was fortunate I arrived at Sholapoor at the time I did, for had the Collector's order, suspending the collection of the Bagayet rates been in force a month or two longer, the greater part of the Revenue, amounting on a rough calculation, to between Rupees twenty or thirty thousand, would probably have been lost.

The following is the letter from Mr. Richard Mills, the Principal Collector of Poona, dated the 28th of December 1835, which accompanied the foregoing letter from the Revenue Commissioner.

1st. I have the honor to hand up an original letter from the Sub Collector, dated 9th December, with enclosure from Mr. Goldsmid, relative to the Bagayet Assessment of the Mohole Talook, as fixed and settled by the late Acting Sub Collector, Mr. Hornby.

2nd. Mr. Goldsmid, in his report now submitted, gives in detail the whole of the letters, orders, &c, which have passed on the subject of the abolition of the Veer Hoonda, and the orders of Government as conveyed in their Secretary's letter of the 27th September 1834, submitted with your communication of the 30th of the same month, in which it is stated, that the Veer Hoonda should be abolished in the Sub Collectorate of Sholapoor, and that the old system of assessing the Bagayet lands at enhanced rates, should be reverted to; and further, the Bagayet rates in force previously to the Revenue Survey, which can doubtless easily be ascertained, will form the ground-work of the change now to be introduced, and when these are excessive, such abatements as may seem requisite, should be made.

3rd. The various orders which were given by the different Gentlemen, who from, time to time, have had charge of the Sub Collectorate, consequent on these instructions of Government, are minutely detailed in Mr. Goldsmid's report, and therefore, I need only refer you to that communication, without recapitulating those instructions.

4th. The orders of Mr. Hornby, which seem to have produced discontent in these Talooks, are detailed in Mr. Goldsmid's 9th and 10th paras. and the effect produced, is recorded in the 11th paragraph.

5th. The operation of the first instructions having been considered to press heavily on the cultivators, Mr. Hornby modified

them in the manner recorded in the 12th para. of Mr. Goldsmid's report.

6th. Thó Mr. Goldsmid has submitted statements, and a detailed explanation, the following summary will fully illustrate the subject, and show at one view, the result of the various orders issued by Mr. Hornby.

Mamool Assessment on Bagayet land in three Talooks, before the survey.... ....Rupees 42,270.

Survey Assessment, including tax on Wells, or Veer Hoonda.... ....21,287.

Assessment according to Mr. Hornby's first scale, recorded in Mr. Goldsmid's letter, parasgraphs 9th, to 11th ....40,418.

Assessment according to Mr. Hornby's third scale, as recorded in the 12th para. of Mr. Goldsmid's letter, including the amount suspended.... .... ..39,269.

7th. From the above statement you will observe, that the Assessment fixed by Mr. Hornby, was less than the Mamool Assessment by Rupees 1,852 only, according to the first scale, and according to the second scale only Rupees 3,000, whilst according to the first scale, the excess of Assessment above the survey rates inclusive of Tax on Wells or Veer Hoonda, was Rupees 19,130, and according to his second scale the increase was Rupees 17,981.

8th. From the 15th to 17th paras. Mr. Goldsmid records the effects of Mr. Hornby's measures, and the discontent created, and in his 19th para. he enumerates the different Gentlemen who have had charge of the Sub-division, in less than one year: on this point it is not necessary for me to offer any observations, it will at once strike Government, what injurious consèquences to the country must result, when such constant changes are taking place, and the absolute necessity of permanently appointing a Gentleman, who is likely to remain at Sholapoor.

9th. Mr. Goldsmid in his 21st and 22nd paras. states the difficulties under which Mr. Hornby laboured in fixing the Assessment, that they were considerable, there can be no doubt, but the chief error of Mr. Hornby's Assessment consisted, in not only assessing Bagayet Land too high, but in assessing it according to a general scale, instead of fixing the Assessment on the land, as directed by Government, after a minute scrutiny, into the circumstances and condition of each individual cultivator.

10th. Referring to Mr. Goldsmid's 22nd para. I beg leave to annex extract, being paras. 8th to 11th of Mr. Hornby's Jummabundy report, in which he records his sentiments on his Assessment. He states, that his settlement connot be recommended, and he proposes three plans, which I shall now discuss, instead of doing so in my general Jummabundy report, now under preparation.

11th. Mr. Hornby proposes first, to assess, according to the plan which existed previous to the survey: secondly, the irrigated land to be taxed at so much an acre, exclusive of the Zerayet rate; third, to resume the Veer Hoonda, but subjecting the Wells exempted by the survey, to the tax &c. except the Wells newly constructed, or expensively repaired.

12th. The instructions of Government, as recorded in para. 2nd of this letter, distinctly state, that the Mamool rates ought to form the ground-work of the change directed to be introduced, and those instructions appear to me to be so clear, that I should have thought, there would have been no difficulty in acting on them, from all the documents I have perused, it would seem, Mr. Hornby's Assessment was grounded on the general principle laid down by Government, but has operated prejudicially, partly from being fixed too high, and partly from having been fixed on a general scale.

13th. I object to the establishment of the Veer Hoonda in any shape, and think, the best and simplest plan, which Mr. Goldsmid also advocates, is that of assessing the irrigated land at so much per acre, above the Zerayet rates.

14th. Mr. Goldsmid however, states, that before this plan can be fully carried into execution, every garden must be measured, classed, and marked off, under the immediate superintendence of an European officer, and suggests, that as that cannot be done during the present year, that only the Zerayet rates be collected this year.

15th. Mr. Goldsmid urges two objections however, to the adoption of this plan; first, the decrease in the revenue, and secondly, the impolicy of adopting measures which might, even for a time, lead the Ryots to suppose, that we intend remitting for good, the extra Assessment on Bagayet land, and his reasons in support of both of these objections, are recorded in his subsequent paragraphs.

16th. Till a correct and accurate measurement of all the garden land in the Sub-division is made, no definite assessment should be fixed. I can see no objection to collecting, as is done in the principal division, only the Zerayet rates of Assessment for the current Fuslee, with a distinct and express understanding, that they are only collected till some final arrangements are made for making an equal Assessment on the garden land, after it has been measured by an European Gentleman, and to counteract the serious evils which have resulted from assessing the Bagayet land at the Mamool rates, which has pressed so heavily on the resources of the cultivators.

17th. The Sub Collectorate consists of only three Talooks, and I would recommend, that an Engineer, or other qualified officer, be placed under Mr. Goldsmid, to measure the gardens

in the Mohole; and another officer under the Sub Collector, to measure the gardens in the Sholapoor and Barsee Talooks. The whole measurement of the three Talooks might, I should think, be finished in a year, and the expense would be trifling, compared with the object to be gained, whether we consider the interests of the Government, or the cultivators.

18th. The evils of employing natives to measure lands, are alluded to by Mr. Goldsmid, and are no doubt, well known to Government, I need not therefore advert to them in this place, one or two measurers under the direct superintendence of an Engineer, or other qualified officer, must be employed, but their salaries need not be high.

19th. I trust you will approve of my having instructed the Sub Collector, not to collect the Tax on Bagayet land, till further orders, but to realize only the Zerayet rates of Assessment.

The following is the letter from Mr. Luard, the Acting Sub Collector of Sholapoor, dated the 9th of December 1835, which accompanied the foregoing letter from the Revenue Commissioner.

I have the honor to forward copy of a correspondence between Mr. Goldsmid and myself, regarding the tax on Bagayet land, as fixed last year, by the late Mr. Hornby.

2nd. You will observe, that I contemplated bringing this subject to your notice some time since, when perhaps some steps might have been taken for forming a new system of taxation for the present year; it is now time to cominence the Jummabundee settlement upon Bagayet land, and all therefore that can now be done is, to prevent injury in future years, by pressing the Ryots this year, for a tax which is every where the subject of most bitter invections and disgust.

3rd. In preference to reverting to any system, as recommended by Mr. Goldsmid, I would recommend the remission by percentage upon the amount fixed by the late Mr. Hornby, because for the very reasons adduced by Mr. Goldsmid, I think, we shall hereafter incur less discontent by these means, than if we reverted to an old system, or any system, which might lead the Ryots to suppose, we had relinquished our claim to the Bagayet tax. It would be much more easy to grant a boon to the Ryots in this manner, than to explain to them our notions, and upon these principles, I would respectfully recommend a remission for this year, upon Mr. Hornby's Assessment, of about one half. As an instance of the difficulty of explaining to Ryots, any measures whatever, or making them generally acquainted with orders of Government, I may mention that, upon my reading before the Ryots, the proclamation concerning Cotton, they said, they intended sowing Cotton last year, but were told, double revenue would be demanded of them.

4th. As the fixing new Bagayet rates will take some time, I would now bring to your notice, the necessity of it, in order that Government may make their arrangements accordingly. The mere fixing of the rates will not be very difficult, but every piece of land must be measured, and if we wish to avoid the future annoyance of references, alterations, and consequent confusion, we must carefully avoid intrusting the task, in any instance, to natives, I would therefore request the services of an Engineer officer, for the purpose.

The following is the letter from Mr. Goldsmid, Assistant to the Principal Collector of Poona, dated the 27th December 1835, which accompanied the foregoing letter from the Revenue Commissioner.

In obedience to the directions contained in your letter of the 16th instant, I have the honor of submitting my opinion on the present mode of assessing the garden land in the Sub Collectorate.

2nd. On your receiving charge of the Sub Collectorate, I addressed you, altho' not officially, on this important subject, which, as you will perceive from a reference to your records, engaged my particular attention, from the very first day I received charge of Mohole Talooka. We in consequence agreed to meet forthwith at Timboornee, and there, by discussing the matter in person, avoid the necessity of a prolonged correspondence: sudden illness has, however prevented either of us from attending, sometime past, to our public duties.

3rd. I have lately been engaged as busily, as the state of my health would permit, in selecting from the Mahratta and English records in your office, the documents which relate to the introduction of last year's Bagayet rates, and I will now endeavour to lay before you, in as concise a form as possible, the information which I have succeeded in gleaning of the subject.

4th. Mr. Andrews, in submitting his opinion, which had been called for, on the operation of the "Veer Hoonda" or Mr. Pringle's plan of placing an Assessment on Wells, expressed himself as strongly disapproving of the Tax, and recommended, that it be, as in the principal division of the Zilla, immediately abolished. The Sub Collector however, at the same time, observed, that he was by no means disposed to think, the Tax should be unconditionally given up, but considered, that there should be substituted for it an extra cess, as formerly, of Bagayet lands, actually under irrigation, and as previous to the introduction of the survey rates, the Assessment on the Bagayet was without any exception, that he was aware of, double that on Zerayet, and this varied from two to three Rupees per Beegha, which, considering the value of the

products, particularly in years of scarcity, would hardly, he apprehended, be deemed excessive. Mr. Andrews was of opinion, that the old rates should be reverted to, without reference to the present old rates on Zerayet lands, as the latter had been altered in every village. Mr. Andrews further remarked, that where cases of hardship might come to notice, enquiry could be made, and remedy applied.

5th. On the 4th of October, intimation was received by Mr. Andrews, who was about to leave Sholapoor, on sick certificate, that so much of his suggestions as have been alluded to, were approved of, by His Lordship in Council.

6th. Mr. Rose, forwarded to the Mamlutdars, under date 6th November, a circular order to the effect, that Zilladars were to ascertain, from actual measurement, the extent of irrigated land comprised in the several numbers, which might be only, in part cultivated, during the current season, as Bagayet.

7th. Mr. Bacon does not appear to have issued any instructions on the subject, during the period he was in charge of the Sub Collectorate.

8th. The late Mr. Money, short as was the period for which he was able to conduct the duties of his office, directed his immediate attention to the subject which the Dufterdar, it appears, lost no time in bringing to his notice, but a fatal attack of fever prevented the Acting Sub Collector from issuing any definite orders.

9th. On the 1st of April, the late Mr. Hornby directed, that the Bagayet land was to be assessed in the following manner, vizt.

First. Such addition was to be made to the Zerayet rates placed at the survey on the Mamool Bagayet land, as would make the gross Assessment on the land come up to that which was levied the year previous to the introduction of Mr. Pringle's arrangements.

Second. No extra tax was to be demanded, in instances where new Wells had been sunk.

Third. The survey rates were to be trebled on lands which have been used for horticultural purposes, previous to the introduction of Mr. Pringle's arrangement, but which had never been hitherto under the former or present Government assessment at the Bagayet rates.

Fourth. Wherever a new Boorkee had been made on the bank of a rivulet, and a little garden land laid out subsequent to the survey, double the survey Zerayet assessment on that land to be levied.

Fifth. Double the survey Zerayet assessment to be levied on land irrigated by a small quantity of water from an Oodee.

N. B.—Altho no order was given in writing, it appears to have been understood by Mr. Hornby, and his native officers, that the land which was irrigated, should be measured in acres, and the acres reduced to Beeghas, at the rate of twenty nine and three quarter goontees per Beegha.*

10th. On the day subsequent to the receipt of these instructions, the Dufterdar represented to the Acting Sub Collector:

First. That the garden land of several villages, when measured at the survey, turned out to comprize more Beeghas than had been entered in the old accounts, and that the Assessment therefore would, if levied at the Mamool rates, exceed the Kumal amount of taxation. He, the Dufterdar, was therefore desirous of being informed, whether or not, the proposed rates were to be levied on the additional number of Beeghas formed by the intended calculations: Mr. Hornby replied, that they were, but that he intended the Mamool rates should include, and not be demanded, in addition to the survey Zerayet Assessment, which might be at present levied on the land.

Second. In the same memorandum, the Dufterdar requested further instructions, as to the manner in which the calculation should be made on the villages where the "Moodbundee" tenure prevailed. It is not however necessary, that I should detail the arrangements which were entered into by Mr. Hornby on this point, as they only affect a single Purgunnah situated in a Talooka over which another assistant is placed.

11th. The annexed contrasted statement will shew the amount of increase in the Revenue, which we were last year to derive, from the assessing the garden land according to the above plan, you will perceive, that there was an increase of Rupees 7,125, or about 31½ per cent on the sum total leviable as Bagayet Assessment immediately preceding the survey, and Rupees 19,130, or about 196 per cent, on the amount to be collected during 1832 | 33, on account of the Well tax.

12th. The introduction of these arrangements having given rise to much discontent, and (as Mr. Hornby himself appears to have considered) having in many instances raised the Bagayet Assessment to an oppressive amount, the adoption of some other measures was considered by your predecessor as necessary; he, therefore, under date 16th June, forwarded to his Dufterdar, a memorandum of instructions, of which the following is the substance.

First. When part only of a plot entered in the old accounts, as Bagayet, is irrigated, the number of Mamool Beegas, according to the old returns and survey acres contained therein, are to be ascertained, and having divided the latter from the former, the

* ¼ of an acre.

product to be the rate at which the irrigated acres, are to be reduced to Beeghas, each of which is to be assessed at the Mamool rates, deducting therefrom the amount of Zerayet Assessment already taken on the land, as per survey.

Secondly. The Mamool Assessment to be entered as the tax on land, whose whole plot may be calculated as Bagayet.

Thirdly. Where ancient Daghs, or pieces have been divided at the survey into numbers, of which some are used for agricultural, others for horticultural purposes, and the remainder at present uncultivated, altogether the gross amount of survey acres contained in the whole of the numbers composed in the Dagh, are to be divided by the recorded sum of Mamool Beeghas, and the product if less than 29¾ Goontees, which must, at all events, be considered whilst making the calculation, as the maximum, is to be the scale, according to which the irrigated acres are to be converted into Beeghas.

Fourthly. The remaining para. of Mr. Hornby's instructions, relative to the Pangre Mohal, where the Moondbundy system, obtains, as above. The rates of Assessment, according to this scale, were not to be introduced without further orders, but detailed statements, contrasting the amount receivable from each village, according to the present plan, with that leviable according to the arrangements first introduced by Mr. Hornby, were to be prepared forthwith.

13th. Mr. Hornby subsequently directed the introduction of the new rates, with this important modification, that the gardens which were now assessed at a higher amount than that leviable according to his first scale, should be merely taxed as high as the sum he had determined on in April last, and the collection of the balance suspended.

14th. The increase in the revenue derivable from Bagayet land was still considerable, as you will observe from a reference to the annexed contrasted statement, there being an increase of Rupees 4,257, or about 18 per cent on the sum total which was to be levied during the year immediately preceding the survey, as extra rates on Bagayet land, and Rupees 14,300, or about 132 per cent on the amount to be collected during 1833 | 34, on account of the Well tax.

15th. It has been argued, that the decrease made at the survey, in the Zerayet Assessment on the irrigated land should be, to some extent, admitted as a set-off to the increase which was caused by the introduction of last years scale, on the aggregate of the extra Mamool Assessment levied on the irrigated portion of land, a reference to the contrasted statements will enable you to form a tolerably correct judgment as to the decrease which had taken place in the Zerayet Assessment on the irragited land, but the native officer (your Dufterdar) who started the argument now un-

der discussion, could not at the time have recollected, that as a set-off to his set-off, the decrease in the quantity of irrigated land should be admitted, for it is needless to observe that, altho' the amount of Assessment, according to Mr. Hornby's scale, might only exceed by, say, twenty per cent the aggregate of extra rates levied during the year preceding the survey, on account of the land which was irrigated, still, if several Wells had fallen into disuse, the actual increase in the remaining gardens must far exceed the above per-centage. If moreover the Zerayet rates were reduced at the survey, and that reduction be continued, whilst a large increase is made to both the survey and Mamool Assessment on garden lands, we are, as the merest child must know, holding out a premium to our cultivators to cease irrigating their land, and grow thereon the common dry, and uncertain crop of the country.

16th. Regarding Barsee and Sholapoor, I can only report from hearsay, but concerning the Mohole Talooka, I can write with certainty, and much do I regret to state, that the results attendant upon the adoption of the above described arrangements, have been most injurious to the interests of Government; the greatest possible discontent has been caused, and the Ryots, several of whom ceased to work their Wells, have been most clamorous in their complaints against what they deemed the injustice of the Brahminee officers. They entreated me to examine the accounts and their receipt books, for they were convinced, that the Government servants had been making unauthorized exactions, and when informed that, what they styled, the extra cess, was levied from them by order of the Collector, it was with the greatest trouble, I appeased them, by promising to represent the circumstances to Government.

17th. Grievously oppressed and wronged, as have been the Ryots of the Sub Collectorate, it requires but little to draw them to utter despair, and to abscond to what we have no right to style the mismanaged Mooulkie districts. The universal disgust then, which was last year caused, by the new mode of taxing Bagayet, will not be a matter of surprise to those who are aware of the following circumstances, which have been attendant upon the much to be regretted introduction of the arrangements I have presumed to canvass.

18th. On the Zilladar measuring the land, as directed by Mr. Rose, the Ryots were informed, that the Veer Hoonda was remitted, and that their garden land would be henceforth assessed at a very low rate: by the authorities of some villages, it was intimated to those interested, that the reductions were only conditional, on giving them a douceur for the officer who was conducting the measurement, the bribe was not, of course, withheld, and the Ryots laid by them but a trifle to be liquidated, when its amount might be determined, on the anticipated low Assess-

ment. So far, however, from a reduction of taxation, the poor dupes found, at a period of the year long after that by which the whole of the Revenue to be realized on garden land ought to have been recovered, that we had, with a view of adding to the Revenue, seized every opportunity of cancelling all former arrangements, and depriving them of immunities, which they had enjoyed time immemorial. A new scale was found necessary, and therefore introduced by Mr. Hornby, two months after the close of the official year; the arrangements were nevertheless to have retrospective effect, and thus, at the termination of June, were unexpected demands made upon our Ryots for money, which it must have been known they had not. The "obstinate rascals" as the then Mohole Mamlutdar, Crushna Bajee, styled them to me, on my taking charge of the district, had refused to pay; but Crushna Bajee was a good hand at collecting, so he managed during the months of July and August to get in Revenue, which should have been realized the December and January preceding; better had it been for our character, as well as the sake of humanity, had every Pie been remitted.

19th. To those who knew your predecessors, it will be a matter of astonishment, how the introduction of any plan, suggested by Mr. Andrews, approved of by Government, and carried into effect by Mr. Hornby, could be attended with aught, but the greatest advantage to the districts. Before, however, forming an opinion on the subject, we should bear in mind the numerous changes which have, during the past twelve months, taken place in this department, viz.—Mr. Andrews left Sholapoor on the 24th October; Mr. Rose was in charge from 25th October to 10th November; Mr. Bacon in charge from 11th November to 31st December; Mr. Money, Acting Sub Collector, from 3rd to 12th, and Mr. Clerk, for Mr. Money, up to the 21st January 1835; Mr. Burton, in charge from 27th January till 13th March.

Mr. Rose, in charge from 13th to 16th March, Mr. Hornby, Acting Sub Collector, from 17th March till 22nd June.

Mr. Rose, in charge from 23rd June to 16th September, Mr. Luard, Acting Sub Collector, from 17th September.

20th. From the tenor of Mr. Andrews report, it is evident, that if that Gentleman's health had permitted him to remain and carry into effect his own plan, it would have been so introduced as to prevent even, partial distress from being felt, or discontent from obtaining. The late Mr. Hornby found, on taking charge, that he had not only to make, in the shortest possible time, the Jummabundee settlement of the three Talookas, and introduce the new Pagayet rates, but to attend to much other business of importance, he promptly drew out a scale, according to which the garden land was to be assessed, and almost as promptly perceiving that his rates were too high, made, what he considered would be

sufficient modifications in his first arrangement. Had not the Acting Sub Collector been removed to the Concan, immediately after directing the introduction of the rates fixed according to the second scale, there cannot be the slightest doubt, as to the course he would have pursued, on learning of the discontent so generally prevailing throughout the district.

21st. When we reflect, that those who had the task of introducing the new Assessment, evidently considered the Mamool Deecana Beega, to be, strictly speaking, a measure of quantity; and that the sole object they were to hold in view, was an immediate increase in the Revenue deriveable from Bagayet land, we cannot be astonished at the lamented effects which have attended the proposed renewal of old arrangements. It was however the anxious, and expressed desire of Government, that we should, by remitting the Veer Hoonda, and reverting, except in cases of hardship, to the former rates, not only receive our fair dues, but also to encourage the Ryots to extend Well irrigation.

22nd. It now only remains to be considered, what arrangements should be substituted during the current, for those introduced during the preceding season. Mr. Hornby, in his Jummabundy report, appears to advocate the resumption under certain modifications, of the Veer Hoonda, he at the same time however, points out two other plans, as capable of adoption, viz.

First. The re-introduction of the plan which existed previous to the survey, and secondly, the irrigated land to be taxed at so much per acre, exclusively of the Zerayet rates. The first of these latter plans, is that, which is supposed to have been adopted last year; the introduction of the second will, I think, be found the best that can be hit on, it is in fact, that which obtains elsewhere. Previous, however, to its introduction, every garden must be measured, classed, and marked off, under the immediate superintendence of an European Officer; and such being the case, the introduction of the proposed plan, during the present season, is absolutely impracticable. I have therefore earnestly to recommend, that Government make a present sacrifice, and levy, until the required classing can be completed, the Zerayet rates only on the irrigated land.

23rd. There are two objections to be urged against the measures, whose adoption I have presumed to recommend.

First. The decrease which will take place in the Jummabundy of the present year.

Secondly. The impolicy of adopting any measures, which might, even for a time, lead the Ryots to suppose, that we intended remitting, for good, the extra Assessment on Bagayet land.

24th. To the first of these objections, it will, I trust, be necessary to urge but little in reply. If we had farmed the district

for a short term of years, we might doubtless, in a pecuniary point of view, be consulting our interests by continuing, until at any rate we could mature other plans. The rates introduced last season, or at all events, by resuming the survey Veer Hoonda, which in my humble opinion was not a little as objectionable as the mode of taxation pursued during the past season; but as officers of a Government whose interests are so inseparably entwined with those of the governed, a regard to our own profit must, leaving all weaker motives out of the question, point out to us the necessity of taking a more extended and liberal view of the subject; under proper management, we should find all land, which is capable of irrigation, an unfailing, and annually increasing source of profit, but then the management must be unexceptionable: the Government, whose servants last season drew too largely on the fount of their resources, must now moderate their demands, until that fount be fully replenished, and they have been able to ascertain, what quantity of its contents they can annually draw, without risking the chance of working it dry.

25th. The remaining opposing argument which I have anticipated being raised, is certainly deserving of the greatest consideration, for if the Ryots are led to suppose from the arrangements into which we may enter, during the present year, that we intend resigning altogether the increased Assessment on land under irrigation, we shall find much discontent caused by the introduction of arrangements which would otherwise be popular. The anticipated evil can only be averted by the European officers who have the task of conducting the Jummabundy settlements, and under whose direct superintendence the different districts are placed, taking the greatest pains to explain to the Ryots themselves, that it is the knowledge of the partial distress which was felt last season, by the unexpected increase of the garden land Assessment, that has induced Government to waive levying Bagayet rates during the present year, but that nothing is further from our intention than the relinquishment of our acknowledged, and undoubted right, to assess in future years, irrigated land at higer rates than those at which dry lands of the same class are taxed. Ryots should also be given to understand, that we shall endeavour to fix new rates of Assessment in such a manner, that hardship will be entailed upon none.

26th. In conclusion, I have respectfully to request, that you will, should you deem it necessary to hand up copy of this letter to the Principal Collector, call Mr. Mills' particular attention to the class of natives who were last year employed to measure the land actually under irrigation, and hence to the inexpediency of adopting that measurement, as the ground-work of any settlement for the current year. The impossibility of making any actual measurement, and inspection of the land, in time, to enable us to assess it for the present Fuslee, must be self-evident, nor is it for me to protest against the adoption of any theoretical mode of boilstering up a defective

system. A consideration of the annoyance, which the adoption of any plan, to be upset during the following season, will cause to our Ryots, as well as the opportunities for corruption, which it will present to those depredators, the public servants in the Sub Collectorate, must, I am certain, speak more against the adoption of the measure I have presumed to oppose, than all the arguments which I can adduce.

As the tax on Bagayet land should now be in a course of liquidation, and we are unable to commence the collections, until aware of the amount to be demanded, no time will, I trust, be lost in the issuing of some definite instructions on the subject of this letter. The arrangements to be entered into, for ensuing seasons, should also be promptly decided on.

STATEMENT contrasting the amount of Assessment levied on irrigated land in the Sub Collectorate of Sholapoor, in 1830 | 31, the year preceding the Survey, and that levied in 1833 | 34, under the Veer Hoonda system, which was introduced with the survey; and those which, according to Mr. Hornby's arrangement were to have been levied, on the abolition of the Veer Hoonda.

	BAGAYET OR VEER HOONDA RATE.	ZERAYET RATE.	TOTAL.
Assessment in 1830 | 31 the year preceding the survey	Rs. 22,908	Rs. 19,361	Rs. 42,269
Assessment in 1833 | 34 under the Veer Hoonda system....	Rs. 10,903	Rs. 10,384	Rs. 21,287
Assessment according to Mr. Hornby's first scale on the abolition of the Hoonda.....	Rs. 30,034	Rs. 10,384	Rs. 40,418
Assessment according to Mr. Hornby's second arrangement....	Rs. 25,203	Rs. 10,384	Rs. 35,587

The following is the extract from the Jummabundy Report, from the late Mr. Hornby, dated 20th June 1835, referred to in the foregoing letter.

Para. 8th. I have much difficulty in settling the rate on the Bagayet land; and though it will not exceed what was taken before the survey, if the proposed remission is granted, still I fear it is too high, it averaging three rupees an acre, exclusive of the Zerayet rate, which will make it about four rupees. The total amount of the Veer Hoonda last year was Rupees 10,903; this year, the irrigated land yields Rupees 30,034; the increase, is owing to the land watered by Wells that were exempted from the tax, by the revenue survey; which land in consequence of the discontinuace of the Veer Hoonda system, is now subjected to the Bagayet rates

of Assessment. This measure has caused great dissatisfaction, the holders of the exempted Wells, which comprised about two thirds of the whole, and who for the last three years have been paying Zerayet rates, are naturally discontented, at the old, and higher rate being resumed.

9th. This settlement cannot be recommended, and a change must be made next year. First, the plan which existed previous to the survey. Second, the irrigated land to be taxed at so much an acre, inclusive of the Zerayet rate. Third, to resume the Veer Hoonda, but subjecting the Wells exempted, by the survey, to the tax. I ofcourse dont mean, that Wells newly constructed, or expensively repaired, should at once be put under contribution. I have attentively read the correspondence on the Veer Hoonda, but can discover no solid objection to the system; some Wells may possibly have been taxed too high, but the great mistake appears to me to be the large proportion of Wells on which the tax was remitted. Many of the Natives, with whom I have conversed, dont object to the system, and a tax averaging about seven Rupees a Well, judiciously laid on, would answer every purpose. The tax not to be increased for twenty years: a Register to be kept in each Village, and the occupier to be furnished with a Putta, if desired.

10th. I dislike much, the plan of measuring irrigated land every season, it is subject to much abuse, both by the Village Officers, and Carcoons on one hand; and the cultivators on the other, and always to the detriment of Government; for irrigated land, which at the time of measurement in December, may be only two acres, a month or two afterwards may have been increased to three, and this without the knowledge of the Village officer, or even if known, not represented, the report of Bagayet land having been prepared.

11th. In revising the Assessment, the assistance, and advice of the cultivators may be made use of with advantage; this attention to their interests would have a good effect, and be duly appreciated by them.

The following is a copy of the letter from Mr. Williamson, the Revenue Commissioner, dated the 11th January 1836, to the address of the Principal Collector of Poona, which was forwarded to Government with the foregoing letter from the Revenue Commissioner.

I have the honor to inform you, that I visited the Villages of Malwundee and Chickrud, for the purpose of enquiring into the Bagayet Assessment.

Malwundee.

2nd. According to the Mamool, the Assessment does not depend on the number of Beegas actually irrigated: a certain number of Kumal Beegas are attached to each Well, subject to the Bagayet rate, the aggregate number of which Beegas is about 310.

3rd. 302½ Beegas pay Rupees four per Beega, and 7½ pay Rupees two.

4th. These were the rates till 1241, when the "Veer Hoonda" or Well Tax, was imposed.

5th. That tax operating partially and unequally, was abolished in 1244, and in 1245 (last year) the "Mamool" was restored under this modification, that if no part of the Bagayet portion of a Ryot's holding was irrigated, then, only the Zerayet rate was leviable, but if the smallest part was watered, the whole was liable to taxation. This order was afterwards modified by one, confining the Assessment to the land actually irrigated.

6th. Of the 310 Beegas rated as Bagayet, 225 Beegas and 10 Pans are actually watered; 30 Beegas, 9 Pans and 15 Veesvussas are waste; 29 Beegas are Zerayet, which though always cultivated, are never watered, and 25 Beegas have, owing to the desertion of the Wells, dropped into the Zerayet.

7th. To the southward of the village, close to the "Bustee," there are a few small gardens of a rich soil, but in the rest, the land is of an ordinary quality.

8th. There are 11 "Pawn Maullahs" or Betel leaf plantations; Sugar Cane, Chillies, Turmeric, Garlic, Plantains, and Native Vegetables of sorts, are also raised.

9th. The Bagayet cultivators are Patells, Coolcurnees, Brahmins and Mallies, whose personal circumstances are generally better, than those of the other cultivators.

10th. I have said, that with the exception of 7½ Beegas, the Bagayet is uniformly taxed at Rupees 4, and tho' that rate does not bear heavily on the best lands, it is too high as a general rate in an impoverished country, where liberal terms are necessary to extend irrigation and excite industry, among a depressed peasantry.

11th. I have accordingly reduced the rate permanently, from 4 Rupees to 3 per Kumal Beega, and struck out of the Bagayet rental, the land which, as above described, has never been watered, as also that no longer watered, from the Wells being in ruins.

12th. One of the decaying Wells is to be repaired at an estimated expense of Rupee 200, by one Gopal Kasur, to whom I have given a written assurance, exempting the land that shall be

irrigated from this Well, from the Bagayet rate for five years, the first year of the term being 1245. The Zerayet is now taxed at the survey rates, but it is provided, that if those rates are modified or repeated, the land in question will be taxed according to any rates Government may fix, a provision, which I think it might be advisable to make, on all similar occasions.

13th. The Veer Hoonda in this village produced in 1243, the last year of its exaction, Rupees 73-2-8, according to the Sub Collector's first order, restoring the "Mamool," the Assessment amounted to Rupees 490, the whole of which was actually realized, but according to the last order Rupees 278 (now on the "amount jumma" account) will, I conclude, be returned, and Rupees 222-2-9 be retained.

14th. The outstanding balances are small, 200 Rupees stands against a Coolcurnee.

Chickrud.

15th According to a rough estimate, the Bagayet amounts to about 70 Beegas.

16th. Acccording to the "Mamool," *all* the land was classed as Zerayet.

17th. In 1232 however, Ramchunder Rao, Mamlutdar of Barsee, assessed the Bagayet at 2 Rupees per Beega, and that Assessment continued till the Veer Hoonda superseded it, in 1241.

18th. Irrigation proceeds with unusual spirit, the consequence of moderate Assessment. I incline also to think, the people have an advantage in there being more land attached to the Wells, than they directly pay for.

19th. There are 23 Wells in actual use, and from 2 to 8 Beegas are attached to each Well. The water is found near the surface, the Wells are easily exhausted, of which there is evidence in their closeness to each other, and in the small circles they irrigated.

20th. The soil, though a good deal inferior to that of Malowndee, produces good crops of Chillies, Barley, Garlic, Turmeric, sweet Potatoes, Onions, &c.

21st. Having visited a number of the Wells, and questioned many witnesses, respecting the operation of the Assessment, I am of opinion, that it is light, and should not be disturbed. It would however be advisable to depute a Carcoon from the Mamlutdar's Cutcherry, to measure the "Bagayet" but that process (which might be easily completed in two or three days,) need not stop the work of collection.

22nd. Irrigation might be extended with great advantage in this highly improvable little village, and I am happy to say, the

Ryots have engaged to construct seven new Wells, some of which will be sunk where Wells never were before, and some in places where hollows shew, they once existed.

23rd. The terms of these engagements are simple: The irrigated land is to be exempted from the Bagayet Assessment for a certain number of years, the period being fixed on a rough estimate of the expense of the Well.

24th. I may here remark, that a great deal of uncertainty attends the sinking of Wells. In light and loose soil, when nearly finished, they are liable to fall in. Where rocks are to be blasted, much labor is often lost from an insufficiency of water; while at other times the water being bad, is comparatively of little use. There are substantial reasons for giving the Ryots liberal terms, and not proportioning the exempted period (as our unenlightened native servants are always inclined to do) in exactness to the estimated cost. Thus, if it was calculated, that the expense would be repaid in 5 years, I would allow 1, 2, or 3 additional years, according to the natural difficulties and risks to which the speculation was exposed. Besides we should recollect, that while Government sacrifices no Revenue, even immediately by these engagements (as the Zerayet rate is generally retained) we are making substantial additions, and that, in the best possible manner, to the slender means of the cultivators, and the permanent resources of the Government.

25th. But to return to my village; I solicit, that no delay should occur in closing with the Ryots for the new Wells. While I was yet on the spot, and considering the presence of a number of persons from other villages, a favorable opportunity for commencing a system to which I look for the happiest results, I signed the "Puttahs" and delivered them in person to the Ryots assembled in the village Chowree.

26th. I take this opportunity of replying to your Report of the 28th ultimo, to which, when I commenced this letter, I had not access.

27th. I see no reason whatever for suspending the collection of the Bagayet Tax (which in your last para. you say you have done,) because, first usage, and the superior value of the produce render the Tax a just demand; secondly, the exemption would operate partially, for its benefits would be confined to the better classes of cultivators, Patells, Coolcurnees, Lingaeet Banians, Brahmins, Mallies &c. thirdly, it would excite hopes to end in disappointment; fourthly, it would be a bad precedent; fifthly, it would hold up to public redicule, the inconsistent imbecility of our public measures.

28th. At Malwundee the people paid 4 Rupees last year, and though for some lands that rate was too high, it would without much

difficulty, have been again paid this year. All were willing to pay 3 Rupees. At Jamgaon, where Mr. Frere had gone, the Ryots seem anxious to revert to the Mamool, and willing to pay it at Chickrud, the rate was evidently easy. Where, I asked, in such cases, is the necessity of suspending the Assessment leviable on the rich products of these comparatively fertile lands, and only taking what is due from Bajree and Joaree fields, assessed perhaps at a half, or a third of the Bagayet rate. The mistake is very striking.

29th. Government directed, that "the Bagayet rates in force, "previously to the Revenue Survey, which can doubtlessly be "ascertained, will form the ground-work of the change now to be "introduced, and when these are excessive, such abatements as "may seem requisite, shall be made." Local enquiries convinced me, that no instructions could be more appropriate, and it is much to be regretted, that the late Sub Collector, instead of at once setting about their practical enforcement, shaping his directions according to circumstances, issued (without probably examining the accounts of a single village) a set of careless, inapplicable squaring rules, which any person of common experience must have at once seen were fashioned in the dark, and must certainly produce the difficulties that arose.

30th. But it is vain to dwell on the past. It is neither the past nor the future, but the present, with which we have now to do. No time is to be lost: two "Kists" are already overdue: time flies, and the question is unsettled. The Sub Collector and his Assistants keeping former usage in their mind's eye, will endeavour to make the best settlement in their power; and to make one that shall neither be onerous to the people, nor impair Government, legitimate claims, which may, I think, be yet effected through their exertions.

31st. With this view I have to suggest, that the Sub Collector and his Assistants, lose no time in repairing to a few of the principal Bagayet villages, taking with them the Mamlutdars and Mahalkurrees, and one or two intelligent Carkoons, and having completed the local enquiries, determine the rates to be levied this season, in the manner above indicated; and when it can be clearly done with advantage, a settlement for future years might be made.

32nd. After having witnessed a few practical examples, the native Servants would understand our object, and they, superintended by the European officers, might complete the work. The Barsee Mamlutdar already knows what is wanted.

33rd. It may be said, that this plan requires time, and that the Jummabundy settlements now engross the attention of all hands, but in "Bagayet" districts, the adjustment of questions respecting Wells, constitutes the most important part of those settlements, for, on the state of irrigation, chiefly depends the prosperity of the country, and the security of the revenue.

34th. When we propose to *suspend* an impost, the probabilities are, we have never grappled with its difficulties. In most cases "Tycoob" is an uncertain and delusive expedient, as a measure of relief to the Ryots; its incertitudes takes largely away from its value, while as one of finance it is deceptive, for whether the suspended demand be just or unjust, it soon becomes irrecoverable, or its recovery is attended with all the difficulties and evils of levying an Assessment, where there is no produce. In answering my letter transmitting your annual report on Nuggur, Government observed on this system as follows "The expediency of placing a portion of the Assessment in Tycoob (in abeyance, or under suspension) is, as you justly observe, very objectionable. It is far better to err on the side of under-assessment, than to leave in any instance undecided, the exact rate to be adopted."

35th There are no European Officers available to measure the lands in the way you propose, and if there were any, I do not think the occasion would justify the measure. When measurements are necessary, they might be made by Carcoons deputed from the Mamlutdar and Mahalkurrees Cutcherries; or a few extra hands may be temporarily entertained, for which the Sub Collector can submit a contingent bill.

36th. In conclusion, I have to beg, you will on receipt of this dispatch, revoke the order against levying Bhagayet rates, and request the Sub Collector to carry into effect the views expressed in this letter, as early as possible: even a little delay may be attended with a large loss.

37th. You will have the goodness to send copies of this letter to the Collector and to your deputed Assistants.

The foregoing letter from the Revenue Commissioner, dated the 4th of February, was replied to, by Mr. Acting Secretary Townsend, on the 22nd of February 1836, in the the following terms.

I am directed to acknowledge the receipt of your letter dated the 4th instant, with accompaniments, regarding the order issued by the Principal Collector of Poona, for suspending the collection of the assessment on Bhagayet lands in Sholapoor, and to inform you, that the Right Hon'ble the Governor in Council considers, that your visit to Sholapoor was well timed, as was your letter of the 11th January, revoking Mr. Mill's order, above alluded to.

2nd. The great present loss which Government would have suffered from this lavish measure, would, I am desired to remark, have formed but a part of the evil: for the minds of the Ryots of Sholapoor would have been once more buoyed up with unfounded

expectations, and their belief of the vacillating policy of our Government would have been confirmed.--No explanation would have made the Ryots understand the unpleasant truth, that the large remission now given, was for but one year, or, if they did, the increased, rates of the next season, however equitable, would have been felt as a grievance, when compared with this golden year of remissions.

3rd. The Governor in Council feels assured, that, but for your instant interference, a Revenue of between twenty and thirty thousand Rupees would have been sacrificed for the current year, and most probably would have been lost for ever. The vigour and decision with which you adopted this measure, is therefore deserving of the highest commendation of Government; and the Right Honorable the Governor in Council considers, the good sense and judgment, displayed in your remarks on the whole subject, deserving of his warmest approbation.

4th. I am at the same time directed to observe, that the Right Hon'ble the Governor in Council, does not mean to speak with any disrespect of Mr. Mills: a laborious and intelligent officer might, in discharging a multiplicity of duties, fall into occasional error; the more especially, when his views were concurred in by an intelligent Assistant, such as Mr. Goldsmid, backed by arguments that, to say the least, were plausible.

5th. I am also instructed to convey the approbation of the Governor in Council, of the exertions of your Assistant, Mr. Frere, as recorded in your letter under reply.

On the 2nd of March 1836. Mr. Williamson, the Revenue Commissioner, addressed the following letter to the Acting Secretary:

With reference to my letter of the 4th ultimo, on the subject of Bhagayet Assessment in the Sub Collectorate of Sholapoor, I have the honor to lay before Government, the accompanying letters on the same subject from the Principal Collector of Poona, and Acting Sub Collector, together with a copy of my reply to Mr. Mills; the tenor of which I trust, will meet with the approbation of the Right Hon'ble the Governor in Council.

The following is a copy of the letter from Mr. R. Mills, the Principal Collector of Poona, dated the 15th of February 1836, which accompanied the foregoing letter from the Revenue Commissioner.

1st. Referring to your letter of the 11th ultimo, relative to the Bhagayet Assessment in the sub division, I have the honor to hand up a letter dated 1st instant, from the Acting Sub Collector.

2nd. Mr. Luard conceives, that until something is permanently settled, it will be in vain to attempt the re-establishing of Wells; I cannot subscribe to this opinion, in its full latitude, but, it is not at all improbable, that the uncertainty of the Bhagayet assessment, may have the effect of making the Ryots very shy of undertaking new works, or repairing old ones; and with a view to overcome this reluctance, Mr. Luard proposes, that a proclamation be issued, declaring, that the Bhagayet rates, whenever onerous, would be reduced, and calling upon the Ryots to mark out their garden land, which he proposed should be measured, by an European officer, a hedge put round it, and then assessed by the Collector.

3rd. He proposes, tha the system shall last ten years, by which time the hedges will have grown up, and the land be much improved in consequence. Mr. Luard in his 13th para. proposes, natives should measure the land, which has already been sanctioned by you.

4th. Mr. Luard's system seems to be, that the Bagayet land should be marked out and surrounded by a hedge, I can see no objection to this, if we can get the Ryots to do it, but Bhagayet cultivation will not increase, till we make the rates such, as the present state and condition of the cultivators can fairly bear, and the moment those rates are known, and are moderate, we shall have no occasion to urge the Ryots to improve their estates.

5th. I have already expressed my opinion on the Bhagayet assessment in the sub division, in my report of 28th December last.

The following is a copy of the letter from Mr. R. D. Luard, the Acting Sub Collector of Sholapoor, dated the 1st of February 1836, to the address of the Principal Collector of Poona, alluded to in the foregoing.

I have the honor to call your attention to the necessity of some early arrangements being made as to the Bhagayet Assessment in the Sub Collectorate.

2nd. The present Bhagayet settlement, ordered by the Revenue Commissioner, under date 11th January 1836, was in fact the result of a choice of evils, and intended, I should imagine, only for the emergency in which we found ourselves involved, for the present year.

3rd. I have no hesitation in saying, that until something is permanently settled, it will be in vain to attempt the re-establishment of Wells which have fallen into disuse, of which there are many hundreds; within the last four years how many changes have we not seen? The Veer Hoonda, the Veer Hoonda abolished, a

rate of assessment fixed by Mr. Hornby, and again abolished, and now a system which seems to indicate, if continued, a prospect of a change in every successive year; the consequence is, that nothing will induce that confidence in the Ryots which is an absolute *sine qua non* for the re-establishment of these Wells, but some fixed system, a system really fixed, and not merely nominally so, and time to establish it.

4th. As a yearly settlement, I do not think the system ordered by the Revenue Commissioner, can possibly succeed, and fear, we shall see, that the decrease of Bhagayet cultivation will not be arrested, if that system be continued; in saying this, it must be recollected, that the Revenue Commissioner merely proposed it as a choice of evils for the present year, whilst I speak of it as a general system, and therefore I trust, without in any way placing my opinion in opposition to that of the Revenue Commissioner.

5th. It therefore becomes my duty to make some prospective arrangements for ensuing years.

6th. When Solon made laws for Athens, he allowed, they were not the best laws in the world, but they were the best the Athenians were capable of receiving, and thus should we, taking local circumstances and usage for our guide, adopt rules suited to the feelings and capacities of the people over whom we preside.

7th. I would propose, that the following plan be adopted.

8th. A proclamation should be issued, and well made known, that Bhagayet rates were about to be reduced where onerous, which would induce Ryots not to lessen the real quantity of land, a Well was capable of watering. An officer then goes to a village and tells the Ryots to mark out the quantity of land they will water, with their Wells, severally, by drawing a plough round it, and planting a hedge of prickly-pear or milk-busk, for which a remission should be granted; and if that had not the desired effect, it should be enforced with an order, whenever it would not be attended with very great inconvenience, or the land should be marked out with stones, or bushes! the European officer then measures the land, and the Collector goes afterwards and assesses it, taking care, the Assessment is liberal; the officer who measures, reporting all circumstances upon which he may have doubts, to the Collector.

9th. By adopting this system, we have several great desiderata; land marks, hedges to keep out antelopes, bullocks &c. by which an immense loss is incurred in these districts, and I would anticipate (perhaps too sanguinly) a settlement of that ever-vacillating subject, the Bhagayet Assessment.

10th. I would propose this system lasted for ten years, by which time the hedges would be grown up, and the land much improved in consequence, and land marks for any future Assessment, firmly fixed.

11th. Upon special investigation, a garden should always be lessened in case a Ryot had taken more land than he could permanently water, and vice versa, but this indulgence should be restricted to those who had surrounded their gardens with hedges; because it will hold out a very great inducement to them to do so, and because, if it be not thus restricted, we shall subject ourselves to the most incessant applications upon the subject, owing to the facility with which any other boundary marks may be removed.

12th. I shall be happy to address you further upon this important subject, provided the outlines of it are considered feasible, but I should observe respectfully, that we are losing much valuable time, and that the sooner therefore, it is commenced upon, the better. I have purposely omitted the subject of Assessment, pending the decision of higher authority upon this subject.

13th. Perhaps, since I have proposed a system of land-marks, it would be better to employ natives in the measuring of land, as any great error would then be easily detected by the European officer in assessing it, than the plan I have above recommended of its being measured by a European officer, under the supervision of the Sub Collector, which I do not think absolutely necessary, considering the means we shall always have, of detecting false measurement.

The following is a copy of the Revenue Commissioner's letter, dated the 29th of February 1836, to the address of the Principal Collector of Poona, in reply to the foregoing.

2nd. Mr. Luard's remarks on the great value of any thing in the shape of a permanent land-mark, are very just, and the plan he proposes, seems well calculated, in certain cases, to secure the end proposed, but as a general measure, it strikes me, that it would not meet all the local and natural peculiarities attending Bagayet cultivation. It is often suddenly extended, and again, as suddenly curtailed, in some cases the tract on one side of the Well is watered one year, whilst in the next year, the tract on the other side is irrigated, and in a third year, perhaps, the water is conveyed by a channel to a tract at some distance.

3d. The first thing to be done, is, to modify the Assessment, and to secure the objects indicated in your 4th para. and in so doing, we shall acquire an experience, and the Ryot, a confidence, that will lead to further improvements.

4th. Enclosures are however at all times desirable, as cultivation cannot be carried to a high state of perfection without them, and though it is an improvement for which we must chiefly look to the Ryot himself, the Sub Collector will do well to take every opportunity of promoting it.

5th. The Bhagayet rates, like every thing connected with the Land Tax, are in such a very confused state in the Sub Collectorate, that I am afraid we would run great hazard in attempting, on any large scale, permanent improvements, at present. Reform has just begun, its foundations are newly laid, the spade is preparing the ground, but the work is necessarily slow, since the workmen have to grope their way in the dark. A hasty movement might divert them from the right line, and cause much time to be lost in retracing a false step.

6th. Where however, the settling officer has collected sufficient information respecting any particular village or garden, to make him confident, that he is proceeding on safe ground, all the qualities of permanence can easily be given to the settlement of that particular tract of land. On the other hand, when the officer does not see his way quite clearly, the settlement might be made, so as to admit of subsequent modification, without, I think, giving any shock to the confidence of the people.

The following letter was addressed to the Revenue Commissioner, by Mr. Acting Secretary Townsend, under date the 14th of March 1836.

I am directed to acknowledge the receipt of your letter dated the 2nd instant, handing up correspondence between yourself, Mr. Mills, and Mr. Luard, regarding the Bhagayet Assessment, in the Sub Collectorate of Sholapoor, and to acquaint you, that the Right Hon'ble the Governor in Council approves generally, of the sentiments expressed in your letter to Mr. Mills, of the 29th ultimo, on this subject.

2nd. Mr. Luard, as he states in his 12th paragraph, has purposely omitted the subject of Assessment, pending the decision on it, of higher authority; but he seems quite aware, that it is the one subject which supersedes every other. His laudable anxiety however, for the relief, and improvement of the districts under his charge, has led him to propose measures, the ameliorating tendency of which, is quite evident, but which cannot be pursued with much effect, or hope, until the rate of Assessment is adapted to the capacity of the country, and which, when that desired adaptation once takes place, the Ryots will probably put in execution themselves, without the advice, or assistance of Government.

3d. The difficulty which, in the 2nd paragraph of your letter to Mr. Mills, you point out as attending any plan of permanently enclosing Bhagayet lands seems to the Governor in Council, to be temporary, and to arise from the depressed state of cultivation, and the imperfect and desultory modes of management, which the indigence and improvidence of the Ryots, in an over-assessed coun-

try have occasioned. In a more settled and advanced state of things, supposing (which will be the case) that Wells, and other means of irrigation become abundant, and that these are established with a proper reference to the existence of springs, to the soil of the neighbouring grounds, and to the inclination of the surface of the earth, though even then the vicissitudes to rain, may cause garden cultivation to shift its place occasionally, yet, its fluctuation will not be great, such enclosures as Mr. Laurd recommends (whose zeal Government highly appreciates) will at that time be of great use in perfecting and securing the advantages otherwise obtained, but they will form part of the system of improvement, and will, in some sense, grow up spontaneously.

4th. The observations in Mr. Mill's 4th paragraph, are excellent, and full justice to them is done in the 3rd para. of your letter under acknowledgment.

Mr. Williamson, the Revenue Commissioner, addressed the following letter on the 16th of March 1836, to the Acting Secretary to Government in the Territorial Department.

I have the honor to submit extract from the correspondence which has passed between the Principal Collector of Poona and myself, on the subject of the Bhagayet Assessment in the Sub Collectorate of Sholapoor, relative to the remission of the Bhagayet Assessment on lands watered from "Boorkees," or places where machinery is erected on the banks of a stream, and the water drawn as from a Well.

2nd. Many of the reasons which induced Government last year to remit, in the Nuggur Collectorate, the "Pan Bureet tax" (or extra Assessment on land which is ordinarily cultivated as dry land, but is occasionally irrigated by the surplus water of a Well, or a Nullah) will apply also to the levy of Bhagayet rates on lands watered from a Boorkee. The supply of water is uncertain, and liable to be effected by various accidents, to which a Well sunk in the usual manner, is not subject; some expense is annually incurred in clearing out the hollow in the bed of the Nullah, whence the water is drawn, and in repairing the masonry which supports the machinery, whilst the whole of the latter is occasionally carried away by a flood higher than usual, or by a slight change in the course of the stream which directs it, so as to undermine the part of the bank.

3d. Where facilities exist for forming a slight dam of turf, or an enterprising Ryot may in a year, like the present, take advantage of an unusually good supply of water in a Nullah, and add considerably to his resources, by irrigating a small quantity of land, but where the local peculiarities of the bed of the stream are such, that a dam cannot be thrown across, the Ryot will very frequent-

ly not attempt to raise the water by means of a temporary Boorkee, as in that case the land would be liable to the Bhagayet Assessment, which, from the uncertainty of the supply of water, the Ryot would probably be unable to pay, and as Mr. Luard justly remarks, it would be impossible to form any plan of a reduced Bhagayet Assessment, which should meet the ever-varying circumstances of such cases.

4th. I would therefore respectfully recommend, that the Right Honorable the Governor in Council would be pleased to sanction in the manner proposed by Mr. Luard, the remission for three years of the Bhagayet rates, on all land watered from such Boorkees, as may be constructed subsequent to the issue of a proclamation to that effect. Though Government will not gain any thing directly, no Revenue will I believe, be eventually sacrificed, as the land will continue to pay the dry land rates, to which it is at present liable; whilst the remission will be a very great boon to numbers of Ryots, and by increasing the resources of an impoverished population, the indirect benefit to the Revenue will, I anticipate, be considerable.

The enclosures to the preceding letter are omitted, as they contain nothing beyond what is stated in the letter.

The foregoing letter from the Revenue Commissioner, was replied to by Mr. Acting Secretary Townsend, on the 2nd of April 1836, in the following terms.

The Right Honorable the Governor in Council, thinking that taxes on agricultural improvement are in principle bad, sanctions the proposition contained in the last para. of your letter, and authorizes you to issue the necessary instructions for carrying it into effect.

I am however at the same time directed to observe, that while on the one hand, the situation of the bed of a Nullah may be variable, and thus render useless, the expense laid out in raising machinery, to draw water from it, is not to be forgotten on the other, that far greater expense and uncertainty attends the sinking of a Well in the first instance.

Mr. Williamson, the Revenue Commissioner, has addressed the following letter on the 8th of August 1836, to the Acting Secretary to Government in the Territorial Department.

I have the honor to transmit copies of a correspondence that has passed between the Collector of Ahmednuggur and myself, regard-

ing the assessment of land watered from Boorkees (or Wells sunk in the beds immediately under the banks of rivers) which are generally used to irrigate Zerayet lands.

2d. There is no doubt that, some times, owing to a large supply of water, these Boorkees are as profitable, as the Wells which irrigate the regular "Bhagayet" lands. They are generally "Cutcha" or temporary works, though sometimes they are as substantially built as common Wells.

3d. Influenced by these views, I thought it might be proper to levy an extra assessment for the land irrigated from the more substantial class of "Boorkees."

4th. But on reconsideration of the question, and in reference to what is stated in Mr. Harrison's 4th para. I think it would be better to levy no such extra assessment.

5th. It would be difficult to draw the exact line between the substantial "Boorkees" and other "Boorkees." The decision of the point, in an extensive district, would necessarily be left in a great measure, to the discretion of the native officers.—In doubtful cases, the deviation would always be against the Ryot; and the uncertainty that would be engendered, as to where the enhanced rate was to be taken, and where it was not, would be a public evil. Mr. Harrison states, "I believe myself, that Government de-"rive far more advantage by not taking any additional assessment "from such lands, both from the smaller remissions we should be "called upon to give on large tracts of irrigated land, and from "the increased means we should have placed at the disposal of "the people, for improving their condition."

6th. I have accordingly to request Government's permission to levy the "Zerayet" rates on lands watered from "Boorkees," whether the Boorkees be permanent or temporary, or whether the supply of water be certain or precarious.

7th. If Government approve of this suggestion, I think its adoption should be extended to the Poona and Sholapoor districts, to which the above arguments apply with as much force as to Nuggur.

The following is a copy of the letter addressed by the Revenue Commissioner, on the 3d of May 1836, to the Collector of Ahmednuggur, which is alluded to in the foregoing letter.

I have the honor to acknowledge the receipt of your letter of the 8th March last, in reply to mine of the 25th February preceding, in which I requested, that you would favor me with your opinion as to the expediency of extending the remission of land watered from Boorkees, recommended in the Sholapoor Sub-Collectorate, to your zillah, on which subject the following observations occur to me.

2nd. Much land is at present cultivated in the Deccan as "Bhagayet," which, owing to its not having been irrigated under the former Government, was never assessed as "Mamool Bhagayet" though fully capable of paying garden land rates ; this land, however, till last year, paid something in the shape of "Pan Burreet." There are also, I believe, some excellent Wells, which were in use under the former Government, but which paid garden land assessment under the name of "Pan Bur" or some other similar denomination. But as the extra assessment on the above described " Bhagayet" land, and that watered from this description of Wells, was not actually called "Mamool Bhagayet," both kinds of land obtained a share in the exemption conferred by the abolition of the "Pan Burreet" cess.

3d. The hardship, and impolicy of this cess, consisted chiefly in the Ryots being obliged to pay for every little extra piece of land, which, by an unusually large supply of water, or some other temporary and accidental advantage he was enabled to water, besides the number of Beegas which he held as a " Mamool Bhagayet." By its operation also, he was forced to pay an extra assessment, when, to prevent the failure of his dry crop of " Jowaree" from a scarcity of rain, he had found it absolutely necessary, to water it once or twice—In such cases the operation of the cess was evidently oppressive.

4th. In abolishing this cess, it could hardly have been the intention of Government to give up the Bhagayet assessment, on lands well able to pay it, and which had participated in the exemption from their not coming under the denomination of " Mamool Bhagayet" owing to the Wells from which they were watered, having been brought unto use, since the commencement of our Government.

5th. " Pathusthul" land again, in your zillah, is seldom watered from a Tank or perennial stream, and is therefore liable to constant failures in the supply of water. The remission of "Pan Burreet" on such land, was an act of obvious justice, and good policy ; but there are cases where the supply of water for "Pathusthul Bhagayet" is permanent (as I observed, was the case at Chechoondee, when I was lately there) and where the claim of Government to an increased assessment is the stronger, from there being no attendant expense on account of bullocks, machinery &c. such land, however, from the extra Assessment, having been termed "Pan Burreet" and not " Bhagayet" has shared in last year's exemption.

6th. As regards the exemption on " Boorkees," I would observe, that they are generally inferior, both in the extent and certainty of the supply of water yielded by them, and are also liable to many accidents against which a Well is secure, but ofcourse, under some circumstances (for instance, on the banks of streams which flow all the year round) the case as respects them, is similar to that of

"Pathusthul Bhagayet" where the supply of water is continual, and exemption from Bhagayet Assessment is not called for.

7th. You will have the goodness to give the above observations your consideration, and be pleased to favor me with your opinion, as to the propriety of fixing an Assessment on those Well and "Paths" which have been exempted from extra Assessment by the remission of the "Pan Burreet," but which for some of the reasons above explained, might fairly be made to pay the garden land rates.

8th. Some such arrangement as the following, might be adopted for its accomplishment, which would distinguish between those "Boorkees" well able to pay the Bhagayet Assessment, and those not.

9th. All lands watered from Boorkees might be exempted from Assessment for the first three, or five years, after the building of them; after which, those whose supply of water was constant, might have a certain number of Beegas of "Bhagayet" attached to each, according to its circumstances, and all those which did not yield a constant supply, should be exempted entirely, from any but the Zerayet rates.

10th. It would be easy to ascertain the constancy and extent of the supply of water. by a reference to the "Lownee Puttrucks" "Number-war-khirds" &c. which always setforth what part of a field is cultivated as "Zerayet," and what as Bhagayet.

The following is a copy of the reply by Mr. H. A. Harrison, the Collector of Ahmednuggur, to the foregoing letter from the Revenue Commissioner.

2d. I beg to inform you, that I see no objection to the lands watered from such Wells and "Paths" in this Collectorate, as have been exempted from extra Assessment, by the remission of "Pan Burreet," being assessed at Bhagayet rates, the lands in question having been ascertained to be precisely similarly situated in every respect, to those at present paying "Mamool Bhagayet" rates.

3d. As regards the arrangement proposed in your 9th para. for assessing lands watered from "Boorkees" I much fear, that any intention we might manifest to assess lands so watered, would have a tendency to check the very general disposition, which has been shewn by the Ryots to irrigate their Zerayet lands: a disposition, which it appears to me, we should encourage, by every means in our power.

4th. There can be no doubt, that a small amount of revenue could be drawn from lands watered from "Boorkees" where the supply of water was constant, but I believe myself, that Government would derive far more advantages by not taking any additional

Assessment from such lands, both from the small remissions we should be called upon to give on large tracts of irrigated land, and from the increased means we should have placed at the disposal of the people, for improving their condition.

The foregoing letter from the Revenue Commissioner, was replied to by Mr. Secretary Willoughby, on the 5th September 1836, in the following terms.

The Governor in Council admits the force of the arguments adduced by yourself and Mr. Harrison against taxing the lands watered from Boorkees, and authorizes you to carry into effect the exemption recommended by you in para. 6th in the Poona and Sholapoor districts, as well as in the Ahmednuggur collectorate. In all these districts (both in the Poona and Nuggur collectorates) the exemption from Assessment should include all lands watered from new, as well as subsidiary " Boorkees," and should be permanent; in which respect the privilege now accorded, will be more favorable than that granted to Sholapoor, in Mr. Acting Secretary Townsend's letter of the 2d April last.

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